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**EFFECT OF CUSTOMER DATA ANALYTICS ON DELIVERY OF CUSTOMER
EXPERIENCE IN COMMERCIAL BANKS IN KENYA**

Ouko Joseph Onyango

MBA 71970/2017

A research dissertation submitted in partial fulfilment of the requirements for the award
of Degree of Master's in Business Administration



Strathmore Business School

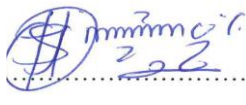
Strathmore University

Nairobi, Kenya

May 2019

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the thesis itself:

Signature:  Date: 30th May 2019

Ouko Joseph Onyango (MBA/71970/2017)

APPROVAL

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ABSTRACT

Classical economic theory has for quite some time now assumed that the customer is a very logical thinker who makes purchasing decisions while being influenced by rationality. This is to mean that core product perspective, are seen to be the main tenets that inform consumer decision making bearing in mind the fact that tangible product qualities influence the purchasing decisions of a consumer. Use of data and analytics helps the organizations understand the customers more for example by knowing what customers want, what their motives are, as well as what influences certain behaviors in customers. The main objective of this study was to investigate the effect of customer data analytics on delivery of Customer experience (CX) among commercial banks in Kenya. The study was guided by the following research objectives: To examine the effect of customer sentiments analytics on delivery of customer experience in commercial banks in Kenya, to determine the effect of customer satisfaction analytics on delivery of customer experience in commercial banks in Kenya and to analyze the effects of sales channels analytics on delivery of customer experience in commercial banks in Kenya.

The research methodology in this study entailed the adoption of a descriptive research design. The population of the study was business executives from all 43 commercial banks in Kenya. The research approach was survey based. Survey based research enables the researcher to target a given population through sampling of the population. A questionnaire was used to collect primary data.

Key findings of the study revealed that delivery of customer experience is influenced by, customer sentiment analytics, customer satisfaction analytics and sales data analytics. The study further revealed that of the three types of analytics, customer sentiment analytics has the highest influence. Finally, the study revealed that success in customer experience was determined by the ability of the commercial bank to adopt data analytics. The study recommended that a possible area for further research is to employ a longitudinal research design in carrying out the study. This will give more clarity to the findings as it will consider the influence of the customer data analytics on delivery of customer experience over time. Further research may also consider expanding the scope to include other financial institutions such as insurance and Sacco's that operate in Kenya.

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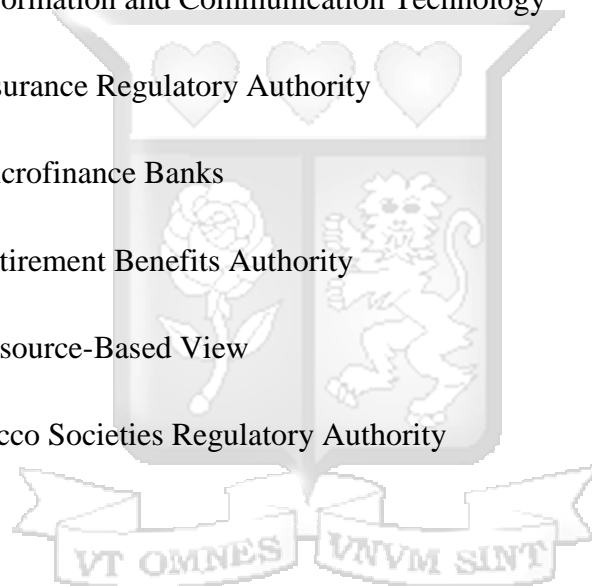
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LIST OF ABBREVIATIONS AND ACRONYMS

CBK	Central Bank of Kenya
CMA	Capital Markets Authority
CX	Customer Experience
FI	Financial Institutions
FSI	Financial Services Industry
ICT	Information and Communication Technology
IRA	Insurance Regulatory Authority
MFB	Microfinance Banks
RBA	Retirement Benefits Authority
RBV	Resource-Based View
SASRA	Sacco Societies Regulatory Authority



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DEDICATION

To my father, Dr. Vincent Ouko Agai, a man after God's own heart.

To my Mother Adipo Wanga a true daughter of my grandfather.

To my loving wife, Mwega and Son Mich.



CHAPTER ONE: INTRODUCTION

1.1 Background and introduction

Customer experience has undergone significant changes from the time it first emerged to be one among the many distinct business as well as management phenomenon. In the modern-day business environment, much of the focus now is not on seeking for new clients but rather on retaining existing clients. This is because for quite several years now, the management approach which considers customer experience to be one among key organization assets of any organization continues to receive so much prominence when it comes to various priorities as well as practices in many commercial banks (Achrol and Kotler, 2015). Additionally, the business environment has also undergone changes in the various aspects that affect the operations of the business, such changes are also the reason as to why marketing practitioners must figure out how best to manage these dynamics in play (Hunt, 2010).

As customer satisfaction and by extension the whole CX phenomenon becomes a critical goal for most businesses, compelling customer experiences increasingly rely on data and analytics. Identifying and collecting the necessary customer data, interpreting it to understand customer expectations, and using it to design and deliver meaningful interactions requires increasingly sophisticated strategies and technologies (Gartner, 2018). This is because competition has continued to grow and become even more intensive. Customer behavior and attitudes have also become a great point of concern as customers continue to shift from just simple buying and selling to complex beings with spending behavior and loyalty being influenced by many factors (Efma, 2017). This necessitates therefore that businesses have a way of understanding their customers and gauging just how good they perform with regards to delivery of customer experience. Palmer (2010) further argued that the current happenings being experienced by various players in the current business environment are mainly as a result of the shift in the basis for competitive differentiation that occurs between various organizations. Specifically, Palmer argues that the main source of competitive advantage for organizations emanates from the ability to manage and deliver exceptional customer experience.

Classical economic theory has for quite some time now assumed that the customer is a very logical thinker who makes purchasing decisions while being influenced by rationality. This is to mean

that core product perspective, are seen to be the main tenets that inform consumer decision making bearing in mind the fact that tangible product qualities influence the purchasing decisions of a consumer. This therefore leads to a conclusion that indeed product qualities are the main sources of competitive advantage (Christopher, 2011). On the other side of the coin however critics have argued that tangible characteristics are likely to be easily imitated and this therefore means that competition based on product qualities is no longer attainable and as such most organizations are now focusing on differentiation mainly on services. The shift to the service perspective is likely to achieve competitive advantage given the fact that consumers created are provided with different services that makes it possible for such consumers to effectively chose the products and services available aside from the core product (Gronoos, 2012).

Customer experience as a concept has for quite some time now been associated largely with organizations that provide services as compared to those that provide goods (Pine & Gilmore, 1998). In the modern-day business environment however, customer experience has been perceived to be a major requirement even for organizations that offer goods. This is mainly anchored on the thinking that products and services continue to be more and more interchangeable as a result of limited functional differentiation that has resulted to competition on the basis of customer experiences, and not necessarily on the basis of the product or service offering (Meyer & Schwager, 2007). It has been further argued that customer experience qualifies to be a fourth economic offering just as commodities, goods and services that are easily recognizable as a result of consumers growing demand for memorable experiences (Pine & Gilmore, 1998).

Meyer and Schwager (2007) have defined customer experience as simply a multidimensional ensemble which customers use to respond to the products and services offered by the seller during the entire customer journey. Customer experience has a composition of both the direct and indirect contacts that exists between the customer and the company (Dimension Data Solutions, 2017). Direct contacts are the type of contacts that emanate from the customers such as purchase, use as well as service, while on the other hand the indirect contacts are those contacts that emanate from the seller or can also emanate from other consumers. In this regard therefore, customer experience is simply the total empirical experience that is comprised of the search, purchase, consumption as well as the after-sale phases of the experience (Verhoef, et al., 2009).

In the modern business environment, consumers find it easy to choose between different brands and product offerings. This is largely because consumers are availed with so many options to choose from as compared to earlier years where the consumer had very limited alternative products and services to choose from and therefore it was not easy to have more choices as is the case today, where consumers have a variety of choices and channels to choose from (Meyer & Schwager, 2007). In the same regard, the consumer market is becoming more globalized making it very challenging for firms to have an assumption that the experience being offered to their clients cannot be imitated and therefore they need not to look for customer data so as to be able to keep in track with the actual experience of their customers with regards to the products and services they offer. Organizations therefore need to have a clear understanding of how analytics and specifically customer data analytics is impacting on strategic decisions towards delivery of the customer experience. From delivery of Omnichannel experience using enterprise collaboration to predictive analytics using Artificial Intelligence and robotics, the key objective in improving customer experience involves use of data insights in adding value for the customers while building and strengthening long lasting customer relationships (Accenture, 2015).

Use of data and analytics helps the organizations understand the customers more for example by knowing what customers want, what their motives are, as well as what influences certain behaviors in customers (Laika & Norazah, 2017). Customer data plays an important role in influencing the strategies that companies will put in place while delivering customer experience that is customer centric. Companies have no alternative but to gather passive and active customer data to monitor their progress with regards to delivery of customer experience as data becomes the key input.

A lot of both unstructured and structured data is being produced daily. However, data is not enough in itself when delivering customer experience, but the success lies in turning the data into useful information by building models and using metrics that can transform the data into useful information (Arthur, 2013). This useful information is what sometimes is referred to as *actionable insights*. This also necessitates that the decision and policy makers of the organization understand the impact of data analytics in the success of their business. Business executives, therefore, ought to be sufficiently knowledgeable of the gains of data analytics and invest in tools that will enable them and the organization at large to understand and monitor the impact of analytics in the delivery of customer experience. The gains realized by use of analytics also ought to be quantitatively and

qualitatively measured by applying relevant customer experience measurement metrics therefore enabling the company to effectively monitor their business processes and customer experience (Oracle, 2017). Data and analytics enable the transformation of raw data into useful information that has the potential of opening a world of opportunities for the business through delivery of superior customer experience (SAS, 2018).

More organizations continue to realize that improving customer experience (CX) has the potential of giving them a competitive advantage over their competitors. The uncomfortable truth is that those organizations that see and embrace the opportunities created by the digital revolution will outpace established market leaders. These organizations are doing so by reimagining their business models and thus business processes and by extension being able to make strategic choices with regards to CX as well as digital strategies (Dimension Data Solutions, 2017). By applying advanced analytics, organizations can improve their customer knowledge hence improving their customer experience which in the long-term results into customer loyalty. To survive in the digital market place, companies have no option but to deliver more than just a product or a service, they must continually improve on their customer experience to boost customer loyalty (Oracle, 2015).

With an overwhelming appreciation on the essence of CX, Financial Institutions today are being forced to deploy data driven and analytics capabilities to not only deliver exceptional customer service, but also to improve and drive efficiencies (Dimension Data Solutions, 2017). This is primarily because Commercial banks are one of the most affected industries in the digital age. The need therefore to offer a highly personalized experience in this era is increasingly critical. However, the lack of business process management and increasing business complexity in a digital world creates a bottleneck in delivery of CX in organizations.

The banking sector in Kenya is regulated by the Central Bank of Kenya and comprises of 44 banking institutions 43 of which are commercial banks while 1 of the institution is a mortgage finance company. Currently 2 out of the 43 commercial banks, have been closed and placed under the management of the Central Bank, these are Dubai Bank and Imperial Bank (CBK, 2018). This study focused on the 43 commercial banks given that they are daily engaged in the delivery of most comprehensive banking services to their customers. Additionally, these commercial banks

provide a full range of banking services that include lending, cash management, trade services, and foreign exchange services among others.

Commercial banks in Kenya have been very much concerned with issues regarding customer experience (Ongeri, 2013). In fact, most commercial banks in Kenya have established independent departments to handle customer issues such as customer complaints and customer feedback. These activities are aimed at ensuring that commercial banks do not lose their customers as they are keen on ensuring that they keep the money deposited and valuable items in safe custody and make it accessible to customers when they need it, they facilitate the transfer of funds from one account to another within the same bank or to a different bank, they offer lending services to customers who need the money at an interest, they offer foreign exchange services and assist, they offer advisory services on financial matters relating to loans and taxation matters.

Commercial banks in Kenya are using customer sentiment analysis by way of good data management by operations to help meet the demands of marketing departments, in terms of generating information about customers and providing the systems to access and manipulate this data. Success in this area has been mixed and the survey revealed examples of where banks had no way of knowing how many customers, they had for certain product areas.

Similarly, commercial banks in Kenya are seeking information on which factors are the determinants of customer satisfaction as this is important to players in the banking sector since, the likely consequences of customer satisfaction are customer loyalty and repeat purchase of the service. Therefore, customer satisfaction is closely associated with the growth and survival of the bank.

Thirdly commercial banks in Kenya have invested in sales data analytics as well as customer service mechanisms and strategies that are customer centric. To be profitable, commercial banks in Kenya have sought a sizeable control of the market in terms of the products and services offered, that are geared at satisfying the ever changing and dynamic needs of customers (Arbore & Busacca, 2009). Failure to enhance customer friendly services, and establish factors that influence customer satisfaction increases the risk that a bank will soon face competitive threats from existing and new entrants (Narteh & Kuada, 2014).

Therefore, investigating the effects of customer data analytics on strategic decisions on customer experience provides the most balanced indicator of the general banking environment in terms of evolution of CX in Kenya.

1.2 Problem Statement

Firms seeking to achieve digital transformation have to priorities the aspect of improving customer experience McKinsey (2016). This can well be achieved in the manner in which an organization undertakes strategic decisions focusing on the delivery of superior customer experiences. This study seeks to examine if indeed customer data analytics plays any role with regards to influencing strategic decisions focsuing on the delivery of customer experience. This is informed by the argument that data driven digital customer experience (CX) is a key component in driving customer centric organizations and pivotal in achieving competitive advantage (Bolton, Gustafsson, McColl-Kennedy, Sirianni, & Tse, 2014). Organizational readiness, openness of data and orchestration of people and processes are major factors that come into play while seeking to deliver improved customer experience. Data and the importance of data is becoming increasingly significant in the day to day running of organizations. Businesses that invest in collection and analyzing of data have a greater chance of growth than those that do not. Delivery of superior customer experience would often require a combination of competencies and activities such as data integration, training and shift in the technologies being used by the organization. This study seeks to investigate whether the use of customer data analytics has any relationship with strategic decisions towards delivery of customer experience in commercial banks in Kenya and to what extent.

Customer experience research, like data analytics and by large big data is still relatively new field of study with little known on the phenomenon however a study conducted by Holbrook, (2017) sought to establish the relationship between big data analyticsand customer satisfactionin the retail industry and established a positive significant relationship. Verhoef, et al., (2009) also carried out a study to examine the role of big data analyticson organization performance and established a positive significant relationship between big data analyticsand orgnization performance and specifically customer satisfaction. The study however established that the challenges that have

been a hindrance to the use of data and analytics in driving businesses has been the inability of front line executives to understand data analytics and its benefits, the lack of enough people with skill and knowledge to implement analytics based solutions to organizational issues and the inability to develop metrics that can satisfactorily gauge the progress of businesses with regards to the use of analytics in businesses.

Although there have been studies conducted on the effect of big data analytics and customer satisfaction, there seems to be very little research on the effect of customer data analytics in Kenya and specifically on commercial banks in Kenya. Additionally, most of the studies conducted focused only on the aspect of customer satisfaction this study however went ahead to look at the delivery of customer experience.

1.3 Research objectives

1.3.1 Main objective of the Study

The main objective of this study was to establish how customer data analytics affects delivery of customer experience in commercial banks in Kenya.

1.3.2 Specific objectives

- i. To examine the effect of customer sentiments analytics on delivery of customer experience in commercial banks in Kenya.
- ii. To determine the effect of customer satisfaction analytics on delivery of customer experience in commercial banks in Kenya.
- iii. To analyze the effects of sales channels analytics on delivery of customer experience in commercial banks in Kenya.

1.4 Research questions

- i. What is the effect of customer sentiments analytics on delivery of customer experience in commercial banks in Kenya?
- ii. What is the effect of customer satisfaction analytics on delivery of customer experience in commercial banks in Kenya?

- iii. What are the effects of sales channels analytics on delivery of customer experience in commercial banks in Kenya?

1.5 Scope of the Study

The scope of the study was limited to evaluating how customer data analytics is affecting the strategic decision making towards delivery of customer experience in commercial banks in Kenya. Customer data analytics was limited to customer sentiments analytics, customer satisfaction analytics as well as sales channels analytics. The study was also limited to the commercial banks that operate within the East African region. Both local and international banks were used for case study with no limitation with regards to the number of years the bank has been operational in the country. The study was conducted within a period of 3 months.

1.6 Significance of Study

The findings of this study will be of great importance to not only the commercial banks that will be involved in the study but also other Commercial banks both locally and internationally that may seek to understand the effect of customer data analytics in delivery of customer experience. Business executives and policy makers can use the findings of the study as a starting point when making decisions on whether to employ analytics in improving customer satisfaction. The findings could also be used alongside other studies for comparison to evaluate the feasibility of analytics driving significant change for business seeking to be customer centric. The findings would also be critical for new banks seeking to enter the market as it will provide a point of reference that will enable them to not only establish but also build a stronger and more loyal customer base.

The study will also seek to provide reliable and tangible findings that could help the regulators of the banking industry (such as the Central Bank of Kenya) in developing critical policies with regards to fair competition and proper use of customer data. Lastly the findings of the study could also be used as a reference point by other academic researchers and as a source of literature review for their studies.

1.7 Definition of Terms

Customer Experience (CX) – CX comes in two critical perspectives, the customers viewpoint, and secondly, the organization's view point. From the organization's view, CX involves designing and delivering an experience to the customer for their consumption (Berry, Carbone, & Haeckel, 2002; Stuart & Tax, 2004). From the customer view point, customer is involved directly in delivery and design of the experience, the customer is at the center of all the touch points and interactions with all actors in the ecosystem involved in delivery of a service or outcome (Schmitt B. , 2011), (Chandler & Lusch, 2015), (De Keyser, Arne, Keiningham, & Klaus, 2015).

Customer Experience Management - Customer experience management can be defined as process by which companies seek to understand and manage their customers' interactions with their brand and the perception of their customers towards their brand or company. CEM will most often be comprised of a set of structured actions. Its main objective is to improve customer experience with the aim of increasing customer loyalty (Shaw & Hamilton, 2016).

Organizational change can be defined as 'some alteration (something is stopped, started, modified, etc.) in the existing organizational arrangements (strategies, structures, systems, cultures, etc.) and/or processes (planning, coordination, decision-making, etc.), (Grant & Marshak, 2011, p. 205).

Data Analytics – data Analytics refers to the qualitative and quantitative techniques and processes used to enhance productivity for business gain. Data is extracted and categorized to identify and analyze behavioral data and patterns. The techniques vary according to organizational requirements

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the various research papers and studies carried out on customer experience (CX), and customer data analytics. It also reviews the literature on customer data analytics and that of the role it plays on strategic decision making towards delivery of customer experience with

focus on financial services institutions. The first part of this chapter will present a theoretical review of literature which will be followed by literature on the effect of customer sentiment analytics on strategic decisions towards delivery of customer experience, then literature on the effect of customer satisfaction analytics on strategic decisions towards delivery of customer experience will follow and finally literature on the effects of sales channels analytics on strategic decisions towards on delivery of customer experience was also reviewed. The chapter also presented a conceptual framework and a chapter summary.

2.2 Theoretical Review

2.2.1 Resource Based View Theory

The resource-based view (RBV) is anchored on the view that resources owned by a company are vital in the achievement of a firm's competitive advantage which can also be translated into superior long-term performance (Barney, 1991). This is to mean therefore that any firm is likely to gain or achieve competitive advantage when it takes part in activities that go a long way to enhance the efficiency or the effectiveness which cannot be offered by other competing firms in the same industry. In addition, a firm can achieve sustained competitive advantage if such an organization has competitors who are not able to copy or imitate the strategy.

The theory suggests that the firms differ in the resources they have, and this difference remain over time (Barney, 1991). A resource is anything tangible or intangible a firm can use, whereas capabilities are abilities to absorb and apply the resources (Barney, 1991). RBV argues that not all resources are strategically relevant. The view considers that resources can provide sustainable competitive advantage if they are rare, inimitable, valuable and non-substitutable (VRIN conditions) and an organization is able to absorb and apply them (capabilities) (Barney, 1991).

This study adopted the Resource-based View theory and is anchored mainly on the way an organization manages its resources. In this study the focus was on how the behavior of the organization is affected by external resources. Information systems have been considered from the resource-based angle for a long time. Data and specifically customer data are a key resource to any organization because it informs decision making. Data analysis segments in most organizations fall under the research and development department. Commercial banks are largely endowed with

customer data given that most activities carried out by the banks requires customer data. In this regard therefore commercial banks can therefore leverage on data to be able to achieve enhanced performance and thus achieve competitive advantage. This study world concluded that data analytics itself satisfies valuable and non-substitutable conditions. This is because customer data analytics provide an organization an option through which the firm can make use of its resources to be able to meet the needs of the customer and therefore enhance customer satisfaction (Finklestein, 2017).

2.3 Customer Data Analytics in Financial Services

Consumer expectations continue to grow every other day. Customers continue to be very dynamic and complex with regards to what satisfies them. FIs are continually changing their strategies to compete favorably and keep up with the expectations of their customers. FIs can amass a lot of data from customers through various methods (PricewaterhouseCoopers, 2018). Continued advancement in technology and communication together with the exponential growth in information and data has resulted in a great shift in consumer dynamics. These data could enable them to improve considerably on their performance (Oracle, 2015). However, there are various challenges that may present themselves with regards to making sense out of the data. These would range from how to combine data from disparate sources to how to analyze and extract the patterns in the massive datasets (McKinsey, 2016).

Data analytics tools can enable FIs to transform this data into meaningful information and hence compete favorably and improve on their delivery of customer experience. Analytics tools enable FIs to know their customers and to understand them well hence placing them in a position from which they can easily design and implement services and products that would fit well into the needs of their customers (Mbama & Ezepue, 2018). FIs can evaluate their “Big Data Maturity” by asking themselves several questions which include: How critical is collection and analysis of data to their business process and strategy, how close do their IT and business teams work, how structured and integrated is their data, how equipped is the business to meet the growing data needs.

Executives in FSI will agree on the importance of customer centricity. However, their understanding of what customer centricity is also key. To achieve customer centricity and improve

customer experience Commercial banks would need to ask themselves several questions to assess where they stand such as; whether they really know and understand their customers, whether they have a product-channel that fits the needs of their customers, whether they are providing multi-channel experience and whether their customers trust them enough among many other questions. Data analytics can enable FIs answer these questions effectively (Garg, Rahman, & Qureshi, 2014). Banks are exposed to a wide variety and amount of data from their customers coming in through various transactions. Unfortunately, most Commercial banks still only use a small portion of this data to make decisions, gain insights and improve on their delivery of customer experience (Turner, Schroeck, & Shockley, 2013). Customer data analytics transcends traditional statistical methods of analyzing data. Unlike the past where data would be collected, and it would take long before the data is analyzed and necessary measures taken in response to the data, today data analytics can provide real-time analysis of data hence enabling fast decision making (King, 2010). Data analytics has the capability of fixing organizational bottlenecks, improve the business process efficiency, open new business opportunities and realize new and better business models (Srivastavaa & Gopalkrishnanb, 2015).

2.4 Challenges in adoption of Data Analytics in Commercial banks

One of the main reasons, however, that Commercial banks have not been that fast in adopting data analytics in improving their customer experience has been their organizational structure and data silos. Data analytics would call for certain changes in the legacy systems currently in place and the need to stream line data and come up linkages that link together the data silos in the traditional systems (Oluwasola, 2017). Traditional data storage techniques and databases would be mostly isolated in nature and not easily shareable across various systems which is a critical requirement for data analytics to be seamless.

Another reason which has led to the slow adoption of data analytics has been the huge gap in personnel with enough big data skills that enable analysis and interpretation of analyzed data (kathuria, 2016). Compliance, governance and data privacy concerns also pose challenges when it comes to adoption of big data and analytics. Lastly, moving from traditional systems to adoption of data analytics is expensive. Financing big data projects and setting up the necessary infrastructure to sustaining them is very costly hence posing a challenge to some Commercial

banks thus making them to not fully integrate data analytics in their operations (Turner, Schroeck, & Shockley, 2013).

2.5 Benefits of Customer Data Analytics to Commercial banks

The today world comprises of various techniques like data science and machine learning algorithms that enable better, faster and cheaper processing of data. Mining data is critical for financial institutions enables Commercial banks to transform raw data to meaningful information such as predictions, trends and projections with great accuracy. Data analytics enables Commercial banks to increase profits, cut costs and compete favorably. Data analytics helps to improve Commercial banks also in the following ways:

Business Profitability - Customer data analytics enables businesses to identify the needs of the customers hence enable them to adjust their price points for their services. It would also enable to drive offers that would result in optimal returns through meeting specific customer needs for specific customer groups rather than general approaches. Data analytics could also enable Commercial banks to improve on their customer acquisition, increase revenue per customer, reduce on the costs required to retain customers, decrease customer attrition and to improve on their products and services (McKinsey, 2016).

Customer attrition - If a financial institution can be aware of a customer who wants to leave the bank, they would be at a greater position to retain the customer and to know why they want to leave. Customer data analytics helps to predict customer attrition or churn as it enables them to know their customer actions, which may reveal the intentions of their customers wanting to move their money from the FSI. This could be shown by cancellation of payments, large withdrawals, customer complaints etc. (Oracle, 2015).

Cost of customer acquisition - McKinsey notes that in most banks, sales and marketing would consume close to 15 percent of their costs. Commercial banks can build targeted promotions after identifying places of interest to customers by bringing together aspects such as purchase history, customer behavior etc. Customer data analytics enables Commercial banks to identify the right customers and target those customers hence increasing the chance of getting those customers while also saving on costs. Data analytics tools such as sentiment analysis tools will help Commercial

banks know which customers should be targeted and come up with successful custom acquisition strategies (Oracle, 2017).

Marketing - Business executives need more than just their intuition to make profitable decisions. The objectivity of decisions can be greatly improved using data and analytics. This is because data analytics would make it easier for the Commercial banks to better understand and gauge their customers. It also enables the organization to know how and where a given customer would fit in the lifecycle of their product. This information could greatly impact marketing for the FSI (McKinsey, 2016).

Data analytics will continue to be a necessity for financial institutions seeking to compete favorably and deliver superior customer experience (Laika & Norazah, 2017). By applying data science tools in collecting, processing and analyzing data, Commercial banks could greatly improve their business process and ultimately align themselves towards achieving customer centricity. Customer data can be used in manner that will boost customer loyalty and increase their lifetime value (Berry, Carbone, & Haeckel, 2002).

2.6 Customer Sentiment Analytics and Delivery of Customer Experience

Customer sentiment analytics is basically concerned with the development as well as the evaluation of informatics tools and frameworks that are used in the collection, monitoring, analysis as well as the provision of summaries and visualize customer sentiments, which mainly are driven by specific requirements from a target application (Zeng, 2010). The main aim of customer sentiment analysis is to facilitate conversations as well as interaction between customers and the organization through the extraction of useful patterns and intelligence whose main aim is to serve entities that include, but are not limited to, active contributors in on-going dialogues.

Customer sentiment analytics can also be useful when it always comes to making customers happy by determining and attending to specific needs of the consumers. This means therefore that with customer sentiment analysis organizations will be well supported through development of solid customer relationships by way of improved engagement that take place in real time basis (Bekmamedova, 2014). In addition, customer sentiment analysis aids in the provision of visual data as well as statistics and this therefore removes any chances of human error, which means that

organizations are now able to make use of the available customer sentiments data to their advantage. For example organizations can make use of customer sentiments analytics in the to make sure that consumers are in better position to clearly understand what they expect to get from their purchasing decisions for any particular good or service (Sharma, 2013). However currently little research has been done on how customer sentiment analysis can enhance consumer satisfaction in commercial banks in Kenya.

In the last few years, as a result of technology advances, the amount of customer sentiments data continues to increase (He et al., 2015), this is as a result of the boom of connecting and interactive tools as well as sites which are linked to lifestyles as well as the activities that occur in the digital world. Customer sentiment analytics also have a way of developing and evaluating scientific methods that also include technical frameworks as well as software tools that are necessary when it comes to tracking, modelling, analyzing, as well as mining large-scale customer data that can be useful to the organization (Stieglitz et al., 2014).

Customer sentiment analysis also aids in the collection, analysis, reporting as well as enhancing better decision-making for customer experiences (Bekmamedova and Shanks, 2014). For instance, an organization is likely to capture consumer data from customer sentiments analytics to be able to clearly understand existing trends in the market, while also predicting the behavior of consumers and help in the identification of the basic influencers within specific market. Interpretation and use of insights from customer sentiments can be very useful to the organization as it will inform decision making that will help the organization to deal with such market dynamics (Bekmamedova and Shanks, 2014).

2.6.1 Customer Sentiment Analytics in Commercial Banks

Customer sentiment analytics plays an important role in the financial industry as seen in the way it has aided in measuring market opinion while also informing market trading (Batrincea and Treleven, 2014). Commercial banks for instance are making good use of the dashboards to aid decision making in the delivery of customer experience for example, Ameritrade and Morgan

Stanley. Stone (2009) further revealed that banks are using customer sentiment analytics for customer engagement programs in the provision of relevant real time interactive content. Commercial banks are also making use of customer sentiment analytics when it comes to stimulating customer feedback on the various product offerings. This will go a long way in enhancing the banks offerings, which is very beneficial to the bank as well as to the banking customers. Additionally, customer sentiment analytics has been used by commercial banks to enhance brand presence and brand awareness.

Dehghani et al., (2012) has further argued that customer sentiment analytics enhances active interaction for commercial banking customers, given that it aids in with customer satisfaction. Customer sentiment analytics have also created an opportunity for commercial banks to offer customized offers to their respective clients. In this regard therefore banks can take consumer satisfaction to very higher levels, as they will be able to respond to consumer feedback and opinions better than before in addition banks will also have a better understanding of customer experience (Kumar and Devi, 2014).

There are many other benefits of incorporating customer sentiment analysis in the banking sector however there are some risks also involved. This is mainly because conservative banks continue to be cynical towards customer sentiments because of lack of control over brand image as well as the potential negativity towards the bank (Klimis, 2010). There is also the issue of online security given that online customer sentiment platforms are open to the public and have low security standards as compared to the banking systems (Dehghani et al., 2012) and this therefore exposes the banks more than any other industry.

2.7 Customer Satisfaction Analytics on Delivery of Customer Experience

Customer satisfaction refers to the average score that the organization is given by customers. It is survey based and is mainly used to assess customer satisfaction with specific services or products. The measure of a customer's satisfaction on the said service or product is most often based on a scale already defined by the organization either after consumption or before consumption. It could be based on a single survey or an aggregate of various surveys.

Additionally, Burstein et al., (2010) contends that creating of customer service experience that enhances customer satisfaction is contingent upon the banks culture, and how the banks culture inform and influences customer centric strategies and priorities. Organizational culture can be expressed or implied based on organizational structures and hierarchies that formally or informally allow the culture to take hold (Bulach et al., 2012). For instance, in the banking sector, if the beliefs revolve around the concept that customer satisfaction is premium, then employees and managers adopt positions that actualize those positions that create the desired effect in customer satisfaction, however, if the bank culture and attitude is more corporate centric, then bank employees will adopt positions that will actualize the corporate centric approach (Gururajan & Fink, 2010).

Equally, Aker and MMbiti (2011) contends that if a banks shared belief is in tandem with customer satisfaction objectives, then the bank will find it easier to integrate customer centric attitudes that can foster customer satisfaction. However, a bank has shared beliefs are averse to any change within the organization, then the bank will find it difficult to respond to dynamic and changing needs of customers. As such, customer satisfaction analytics can help an organization gain competitive advantages that can enhance customer experience (Gururajan & Fink, 2010).

2.7.1 Customer Satisfaction Score (CSAT)

This score enables organizations to collect data at various service points. Multiple sources of data also enable comparison and make it possible to identify weak points. The main idea behind CSAT is to find out how the success of the business is directly linked to the customer. There are, however, arguments against CSAT such as the argument that a customer being satisfied by the product or service would not necessarily mean that he or she has shifted loyalty to the organization. Loyalty to the product would also not directly mean that he is dissatisfied with the product of another company (Hilpi, 2017).

2.7.2 Net Promoter Score (NPS)

NPS index depicts the willingness of the customer to recommend the organization's services/products to others. It separates customers into three types of customers: Promoters (loyal + satisfied), Passives (satisfied + unenthusiastic), and Detractors (unsatisfied + unenthusiastic). The data is collected by use of surveys. It considers the satisfaction of the customer on the

product/service and the willingness to use it again. This is shown by referrals and repeated purchases. It does not necessarily consider customer behavior and may not provide much information hence may not be enough when used in isolation without supplementing it with other metrics (Hilpi, 2017).

2.7.3 Customer Effort Score

It is a score that depicts the effort a customer would put to do a task e.g. if he would strongly agree or disagree. It argues that rather than just satisfying customer needs, there is need to reduce the effort a customer puts in purchasing it using a product or service with the aim of improving on the loyalty of the customer. It however is not as popular as NPS and CSAT at its predictive power is weak apart from a few industries or platforms such as in online shopping. With the growing speed in demand for [products and their provision within the shortest time possible, it could be a key indicator of customer experience (Hilpi, 2017).

2.7.4 Churn Rate

It is used to measure the organization's customer retention ability by finding the ratio of customers who have left to the total number of customers within a given amount of time. It is especially popular with subscription-based services. It is highly dependent on the ability of the business to keep track off its customers. It could be used as an indicator of customer behavior (Hilpi, 2017).

2.7.5 Average Handling Time (AHT)

This survey shows how rapidly agents can be able to provide customers with the necessary support they need and answer their queries. It is an aggregate of the time taken to respond to customer issues. The faster the customer queries are addressed the more the likelihood of the customers to be satisfied (Hilpi, 2017). The measurement framework used by companies should be able to give a clear view of the customer satisfaction, point out areas that need improvement, give insight on what drives customer loyalty, bring to light the interactions that matter most and visualize the whole customer journey.

Improving customer experience often calls for integration of a variety of business metrics to understand how these metrics relate to one another. This is at times referred to as business linkage analysis process. How the companies integrate/link various metrics is dependent on the business goal they are trying to achieve (SAS, 2018)

2.7.6 Benefits of Customer Satisfaction Analytics

Business executives need more than just their intuition to make profitable decisions. The objectivity of decisions can be greatly improved using data and analytics. This is because data analytics would make it easier for the Commercial banks to better understand and gauge their customers. It also enables the organization to know how and where a given customer would fit in the lifecycle of their product. This information could greatly impact marketing for the FSI (McKinsey, 2016).

Data analytics will continue to be a necessity for financial institutions seeking to compete favorably and deliver superior customer experience (Laika & Norazah, 2017). By applying data science tools in collecting, processing and analyzing data, Commercial banks could greatly improve their business process and ultimately align themselves towards achieving customer centricity. Customer data can be used in manner that will boost customer loyalty and increase their lifetime value (Berry, Carbone, & Haeckel, 2002).

Customer satisfaction analytics enables businesses to identify the needs of the customers hence enable them to adjust their price points for their services. It would also enable to drive offers that would result in optimal returns through meeting specific customer needs for specific customer

groups rather than general approaches. Data analytics could also enable Commercial banks to improve on their customer acquisition, increase revenue per customer, reduce on the costs required to retain customers, decrease customer attrition and to improve on their products and services (McKinsey, 2016).

2.8 Sales Data Analytics on Delivery of Customer Experience

Sales data analytics continues to be an essential function of businesses in the modern business world. A study carried out by the IBM Institute for Business Value revealed that sales data analytics is a top priority for business managers today. This is because the study findings revealed that more than 50% of the respondents agreed that sales data analytics has a significant influence on customer. In the same regard, top-performing firms were seen to have a higher tendency in the adoption of sales data analytics in comparison to low-performing organizations (LaValle et al., 2011).

In another study carried out by Bloomberg in 2011, it was revealed that 97% of companies that have revenues above \$100 million adopted some form of sales data analytics, in comparison to a figure of 90% from previous years. As a third data point, a study performed by SAS Institute and MIT Sloan, which covered around 2500 respondents from roughly 25 industries, found that 67% of respondents felt that they are gaining a competitive edge from their use of analytics (Kiron et al., 2013).

Most organizations have accepted that there are quite several benefits even though there is still a large gap that exists on the role of sales data analytics on customer experience. Kiron et al. (2013) for instance carried out a study and was able to determine that 60% of firms involved in the study agreed that sales data analytics has an influence on customer experience. On the other hand, the study revealed that 29% of surveyed firms were still struggling to utilize data beyond basic reporting and marketing applications. LaValle et al. (2011) on the other hand sought to establish the relationship between classification of capabilities with regards to sales data analytics and its relationship with customer experience. The study revealed a positive significant positive relationship between the two factors.

2.8.1 Sale data Analytics and Decision Making

Sales data analytics has one characteristic which is always mentioned to be a very distinguishing feature this is the ability as well as the willingness to make use of real-time sales data when it comes to everyday decisions. Good firms use sales data in the evaluation of previous decisions, to be able to automate operations and to report on performance, on the other hand however excellent firms make use of real-time data to drive their day-to-day decision making as well as their innovation activities. Kiron et al. (2013) for instance opines that exceptional performers look at sales data as a core asset while analytical insights are seen to be part of the culture of the firm and are useful when it comes to strategic decisions.

Finally, sales data analytics can be adopted by exceptional performers to gain mileage by adopting data visualization techniques, as well as simulations and scenario development (LaValle et al., 2011). This is because, such firms can identify the business challenges which are likely to result significant gains for the organization while also focusing and focus on organization challenges.

2.8.2 Sales Data Analytics on Customer Loyalty

Sales data analytics enables businesses to effectively single out what exactly the customers expect hence enable them to adjust their price points for their services. It would also enable to drive offers that would result in optimal returns through meeting specific customer needs for specific customer groups rather than general approaches. Data analytics could also enable banks to improve on their customer acquisition, increase revenue per customer, reduce on the costs required to retain customers, decrease customer attrition and to improve on their products and services (McKinsey, 2016).

Cespedes (2014) identifies three important factors that are beneficial when it comes to sales data analytics, these are: customer call capacity, close rate as well as profit per sale (Cespedes, 2014). Sales data analytics has been useful in the improvement of all three of these factors but with varying degrees of success. Customer call capacity is seen to be the most problematic source for productivity gains; this is mainly because it requires giving more work to the current sales force or totally bringing on board new employees. However, in a study carried out to establish the effect of sales data analytics in the pharmaceutical industry by Eggert and Serdaroglu (2011) it was

established that there was a positive significant relationship between sales data analytics and organization performance and especially improved customer understanding (Eggert and Serdaroglu, 2011).

Cespedes et al (2014) also carried out a study to examine the relationship between sales data analytics customer loyalty and revealed that there was a positive significant relationship between sales data analytics and customer loyalty in the manufacturing industry. The study further established that all three productivity factors is customer selection had a significant relationship with sales data analytics. As a motivation for studying the customer selection approach, Cespedes et al (2014) further avows that indeed sales data analytics is an essential attribute to customer experience.

To this end, it has been proved that there is need to develop real-time recommendation systems especially when it comes to digitally distributed services such as Netflix and Amazon. This is because the existence of these systems has made real-time data available and therefore it enhances the customer experience for several organizations. These organizations however need to develop a few changes especially with regards to sales data that inform real time decisions for these respective organizations. Additionally, real-time decision systems are essential especially when it comes to distribution systems that might not be able to fit properly on real-time recommendation systems which have ideally been the order of the day in most organizations (Cameron and Brunette, 2016).

2.9 Research Gaps

Results of previous studies on how data analytics affects delivery of customer experience, has shown that indeed there is a positive relationship between customer data analytics and delivery of customer experience. Customer sentiment analytics has been seen to have a positive relationship with delivery of customer experience in the financial industry as seen in the way it has aided in measuring market opinion while also informing market trading (Batrincea and Treleaven, 2014). Commercial banks for instance are making good use of the dashboards to aid decision making in the delivery of customer experience. Stone (2009) further revealed that banks are using customer sentiment analytics for customer engagement programs in the provision of relevant real time

interactive content. Commercial banks are also making use of customer sentiment analytics when it comes to stimulating customer feedback on the various product offerings. This will go a long way in enhancing the banks offerings, which is very beneficial to the bank as well as to the banking customers. Additionally, customer sentiment analytics has been used by commercial banks to enhance brand presence and brand awareness. This study however only focused on customer engagement practices but not specifically on customer experience. This study sought to fill this gap in research by focusing on customer experience as a dependent variable.

Dehghani et al., (2012) further argued that customer sentiment analytics enhances active interaction for commercial banking customers, given that it aids in with customer satisfaction. Customer sentiment analytics have also created an opportunity for commercial banks to offer customized offers to their respective clients. In this regard therefore banks can take consumer satisfaction to very higher levels, as they will be able to respond to consumer feedback and opinions better than before in addition banks will also have a better understanding of customer experience (Kumar and Devi, 2014).

In another study carried out by Bloomberg in 2011, it was revealed that 97% of companies that have revenues above \$100 million adopted some form of sales data analytics, in comparison to a figure of 90% from previous years. As a third data point, a study performed by SAS Institute and MIT Sloan, which covered around 2500 respondents from roughly 25 industries, found that 67% of respondents felt that they are gaining a competitive edge from their use of analytics (Kiron et al., 2013). This study did not capture the aspect of how customer data analytics affect customer experience in the developing countries.

Finally most organizations have accepted that there are quite several benefits even though there is still a large gap that exists on the role of sales data analytics on customer experience. Kiron et al. (2013) for instance carried out a study and was able to determine that 60% of firms involved in the study agreed that sales data analytics has an influence on customer experience. On the other hand, the study revealed that 29% of surveyed firms were still struggling to utilize data beyond basic reporting and marketing applications. LaValle et al. (2011) on the other hand sought to establish the relationship between classification of capabilities with regards to sales data analytics and its

relationship with customer experience. The study revealed a positive significant positive relationship between the two factors.

Cespedes et al (2014) also carried out a study to examine the relationship between sales data analytics customer loyalty and revealed that there was a positive significant relationship between sales data analytics and customer loyalty in the manufacturing industry. The study further established that all three productivity factors is customer selection had a significant relationship with sales data analytics. This study only focused on the manufacturing industry and therefore these findings are not necessarily applicable to the banking industry in Kenya. This study therefore sought to examine how this applies to the banking industry in Kenya.

2.10 Conceptual Framework

This study examines the effects that customer data analytics would have on the delivery of Customer experience in Financial Services Institutions (FSI) specifically commercial Banks. The research was focused mainly on customer data analytics from three types of customer data sources analytics: customer sentiment analytics, customer satisfaction analytics and finally sales data analytics and how each one of them affects the delivery of customer experience through the decisions that business managers or the organization makes in this regard. The research therefore assessed use of customer sentiment analytics, customer satisfaction analytics and finally sales data analytics for strategic decisions on the delivery of CX in commercial banks.

Independent Variables

Dependent Variable

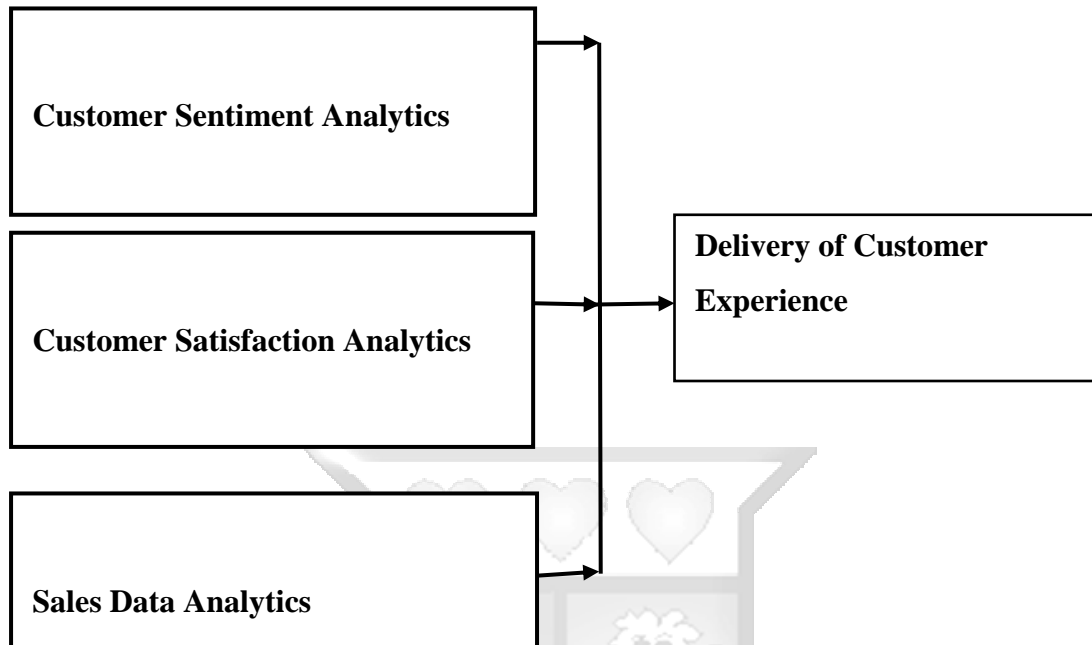


Figure1.1: Conceptual Framework

2.11 Operationalization of Variables

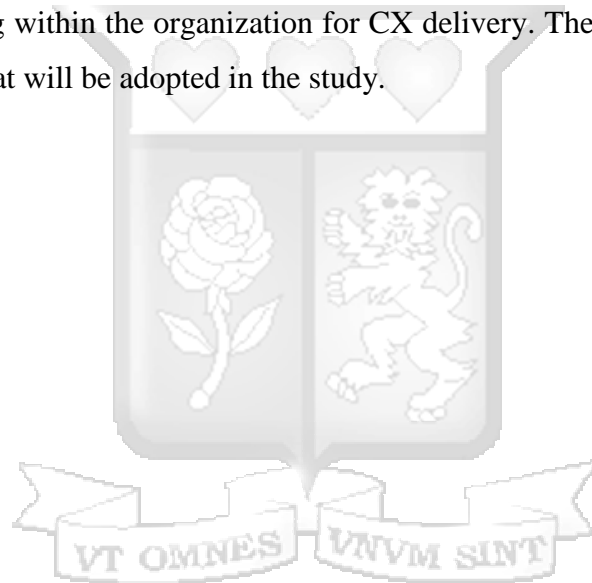
Table 2.1: Operationalization of Variables

Objective	Variable	Data Collection Tool	Data Analysis Technique
To examine the effect of customer sentiments analytics on delivery of customer experience in commercial banks in Kenya	Customer sentiment analytics	Questionnaires	Descriptive statistics Regression Analysis
To determine the effect of customer satisfaction analytics on delivery of customer experience in commercial banks in Kenya	Customer satisfaction analytics	Questionnaires	Regression Analysis
To analyze the effects of sales channels analytics on delivery of customer experience in commercial banks in Kenya.	Sales Channels analytics	-Questionnaires	Regression Analysis

2.12 Summary

This chapter reviewed the various research papers and studies carried out on customer experience (CX), and customer data analytics. The literature (both empirical and theoretical) on customer data

analytics and that of the role it plays in delivery of customer experience with focus on financial services institutions. The first part of this chapter presented a theoretical review of literature which was followed by literature on the effect of customer sentiment analytics on delivery of customer experience, then literature on the effect of customer satisfaction analytics on delivery of customer experience and finally literature on the effects of sales channels analytics on delivery of customer experience. We also reviewed the RBV approach to gaining competitive advantage with focus on technology as a resource that can be leveraged by commercial banks for this purpose. Finally, the chapter also presented a conceptual framework developed using customer sentiment Analytics, Customer Satisfaction Analytics and Sales Channel Analytics as independent variables and Delivery of CX as dependent variable measured in terms of how the independent variables inform strategic decision making within the organization for CX delivery. The next chapter presents the research methodology that will be adopted in the study.



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter was concerned with the research methodology which was adopted in this study. The chapter is made up of different sections that include a section on the research design which was followed by a section on the population of the study as well as the sampling methods and sampling techniques as well as the methods of data collection adopted in the study as well as the data analysis and interpretation section. The chapter also has a section on validity and reliability of the data as well as a chapter summary.

3.2 Research Design and approach

This study employed a descriptive research design. Descriptive research seeks to provide solutions to questions of what, where, who, when and how. It is used when the researcher seeks to gain info about the current condition of a phenomena and thereafter give a description of what is in existence with respect to the given variables and the relationship between them (Yin, 2010).

The research approach was survey based. Survey based research enables the researcher to target a given population through sampling of the population. It provides opportunity to collect primary data which was used in establishing the relationship between the various variables (Kuada, 2012). Data generated from survey research is not complex hence easily analyzed. Survey research has also the advantage of being suitable for both qualitative and quantitative research (Lapan, Quartaroli, & Riemer, 2011).

3.3 Population and Sampling

3.3.1 Study Population

The population of the study included all the 43 commercial banks operating in Kenya. Kenya. The selection criteria for the commercial banks will be based on their regional presence. The commercial banks had to be operating in and outside Kenya. The regional presence provided for the opportunity to assess the difference in executive education on importance of data analytics as well as effect of technology maturity on embracing digital CX. The unit of analysis was the

respective commercial banks. One representative from each of the 43 commercial banks was selected to fill in the questionnaire.

This study adopted a census method since the total population is small, i.e. 43 elements, and yet stratified based on varied criteria (size, ownership) with each criterion having few elements. In this regard therefore the census method will be adopted in studying each of the strata. The approach of this study was supported by the argument of Cooper and Schindler (2014) who argues that that the advantages of sampling over census studies are less compelling when the population is small and the variability within the population is high. This meant that if the population under study was small and variable, it follows that any sample drawn is likely not to be representative of the entire population from which it is drawn.

3.4 Data Collection Methods

Primary data was the main source of data for this study. This kind of data was collected by way of structured questionnaires which were divided into four distinct sections, with each section focused on answering the three research questions. The first part of the questionnaire was concerned with general information of the respondents while the three subsequent subsections were concerned with information regarding the three research objectives of the study. A five-point Likert scale ranging from one to five was adopted in the questionnaire to be able to determine each of the variables.

The questionnaire was administered to the respondents physically as well as online through emails to be able to obtain more information while at the same time acquires clarity of information received from the respondents. The researcher then reviewed the questionnaires to make sure the quality of the data collected is up to par, this was also done to make sure that such questionnaires are fully completed, having questions answered properly and that all figures are tallied correctly.

3.5 Data Analysis

Data analysis in this study was done with the aid of the Statistical Packages for Social Scientists (SPSS Version 20.0) software. This is after the collected data was cleaned and coded before being keyed into the SPSS software. Once this was done descriptive statistics such as frequencies and percentages were generated with the main aim of showing the level of agreement of the

respondents on various issues that were tested in the study. The study also generated inferential statistics such as regression analysis to ascertain the nature and direction of the relationship.

The following regression equation was adopted in the analysis.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where:

Y= Strategic Decisions towards Delivery of Customer Experience

X₁ =Customer Sentiment Analysis

X₂= Customer Satisfaction Analytics

X₃= Sales Data Analytics

The study then presented the analysed data in tables and figures respectively.

3.6 Research Quality

3.6.1 Validity

The researcher first carried out a pilot to test the validity of the study. The sample audience mainly made up of peers as well as subject experts who were 5 in number this represented 11% of the target population. The main reason for conducting the pilot study was to effectively ascertain if there are any struggles the respondents are likely to go through answering the instrument, the ease with which respondents understand the questions and also carrying out a test on the response time to fill in the questions with a review of the instrument before it was administered.

Validity of the research instrument was achieved by way of opinions of experts in the field of study especially the study's supervisor and lecturers in the department of strategic management. Once this was done the researcher carried out necessary revision and modification of the research instrument to enhance validity. Shanghverzy (2003) defines validity as to the consistency of measurement and which is assessed by way of the test–retest validity method.

3.6.2 Reliability

Reliability is mainly concerned with the measurement of repeatability of the study. This basically revolves around consistency in the study and the stability of the analyzed data. The Cronbach's Alpha method was adopted in the study to be able to measure reliability. This is a scientifically acceptable measure of how reliable a study is, and which has a set Alpha value to show if the study was reliable or not. An alpha value of 0.7 and above means that the variables in the study pass through the reliability test and are therefore considered enough for the start to proceed to the next stage of data analysis 0.7 (Nunnally, 1978).

3.7 Ethical Considerations

The respondents participated based on informed consent. This means that enough assurances and information was given to the respondents and the intentions of the research also made known to them, so they can voluntarily decide whether to participate without any coercion or pressure. The participants had the right to withdraw whenever they want to and were not be compelled to answer every question. Every response was treated with high confidentiality. The individuals who participated in the study remained anonymous throughout the study. There was no attempt to influence respondents to change their responses. The responses of the respondents were not exaggerated or twisted in any way to fit any narrative but were presented as given by the respondents.

There was no discrimination of the respondent's info based on race or gender or any other form of discrimination. The questions sought to uphold dignity of the respondents by ensuring they are not offensive. The benefits of the study were made known to the respondents and were not overstated or understated. In case of any risks they were made known to the respondents to minimize any potential harm. The dignity of the respondents was upheld to prevent any psychological or physical harm that may arise due to embarrassing questions or disclosure of information which could cause anxiety or fear.

CHAPTER FOUR: DATA ANALYSIS AND INTEPRETATION OF FINDINGS

4.1 Introduction

This chapter presents an analysis of the findings of the study with regards to the various responses issued by the respondents involved in the study. In this study a total of 43 commercial banks were involved in the study in which one respondent from every bank was issued with a questionnaire. The response rate was 100% given that the unit of analysis was relatively small. This chapter therefore presents the background information of the respondents followed by analyzed data in respect of the three research objectives. A chapter summary is also presented at the end of the chapter.

4.2 Background Information

The first part of the questionnaire is focused on presenting the background information of the respondents, particularly with regards to age, level of education, number of working years, position in the bank as well as the background information of the bank regarding the years of operation of the various banks. One representative from each of the 43 commercial banks was selected to fill in the questionnaire.

4.2.1 Age of the Respondents

Table 4.1 reveals that 14% of the respondents were of the age 20-25 years, 20% were of the age 26-30 years, and 26% were of the age 31-35 years while 40% were above 36 years. This is an indication that the respondents involved in the study were largely above 30years of age and therefore their experience in the industry is likely to be high bearing in mind their age.

Table 4.1: Age of the Respondents

Age of the Respondents		Frequency	Percent
	20-25 Years	5	14
	26-30 Years	9	20
	31-35 Years	11	26
	Above 36 Year	18	40
	Total	43	100.0

Source: Survey Data (2019)

4.2.2 Gender of the Respondents

Table 4.2 reveals that 54% of the respondents were of the male gender while 46% were females. This finding is an indication that indeed commercial banks in Kenya have minimal gender consideration in their workforce and commercial banks in Kenya have adhered to the constitutional requirement of 30% gender representation in employment opportunities in the country.

Table 4.2: Gender of the Respondents

Gender of the Respondents		Frequency	Percent
	Female	20	46
	Male	23	54
	Total	43	100.0

Source: Survey Data (2019)

4.2.3 Level of Education

Table 4.3 shows that 5% of the respondents were diploma holders, while 46% of the respondents had bachelor's degrees as their highest level of education, 37% of the respondents had master's degree while 12% had Doctorate degrees as their highest level of education. Going by the findings, it is evident that most commercial banks in Kenya have a workforce that is well educated to understand the various concepts regarding commercial banking in Kenya.

Table 4.3: Level of Education

Level of Education		Frequency	Percent
	Diploma	2	5
	Bachelors	20	46
	Masters	16	37
	Doctorate	5	12
	Total	43	100.0

Source: Survey Data (2019)

2.4 Years of Experience

Table 4.4 reveals that 5% of the respondents had less than 3 years of work experience, 23% had 3-5 years, 35% had 6-10 years of work experience, and 37% had more than 10 years of work experience. This is an indication that majority of the respondents involved in the study had more than 10 years of working experience which is enough for them to have a clear understanding of the various dynamics in the banking industry in Kenya.

Table 4.4: Years of Experience

Years of Experience		Frequency	Percent
	Less than 3 Years	2	5
	3-5 Years	10	23
	6-10 Years	15	35
	More than 10 Years	16	37
	Total	43	100.0

Source: Survey Data (2019)

4.2.5 Position in the Bank

Table 4.5 shows that 2% of the respondents were in the executive level of management, 37% of the respondents were in senior management, 42% of the respondents were in middle level management, 19% of the respondents were general staff. These findings affirm that indeed the

study was all inclusive in terms of the various cadres of employees in the commercial banks in Kenya.

Table 4.5: Position in the Bank

Position in the Bank		Frequency	Percent
	Executive Level	1	2
	Senior Management	16	37
	Middle Level Management	18	42
	General Staff	8	19
	Total	43	100.0

Source: Survey Data (2019)

Figure 4.1 shows that over half the respondents (56%) believe that customer experience (CX) is extremely critical to gaining competitive advantage. Summing up the two key percentages (84%) of very critical (28%) and extremely critical (56%) shows that the role of CX not only for commercial banks but for all organizations is valuable and enables commercial banks to gain competitiveness.

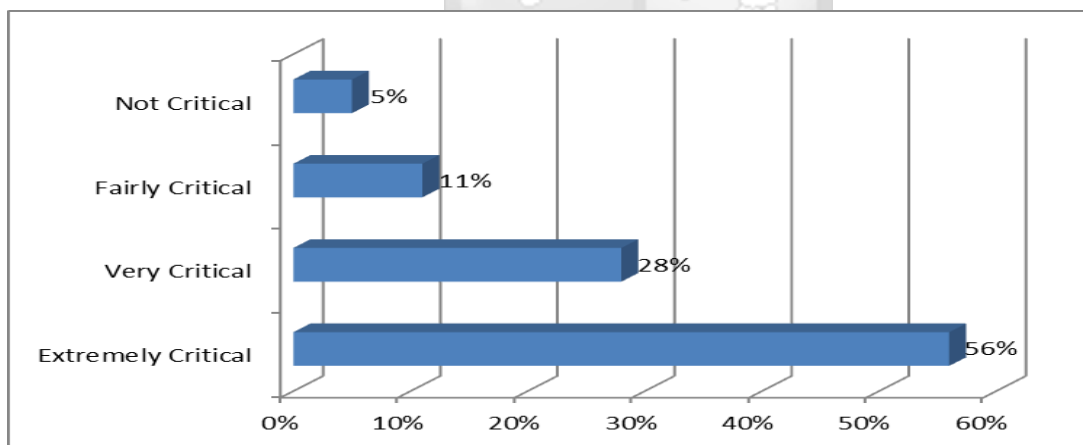


Figure 4.1: Customer Experience and Competitive Advantage

Figure 4.2 shows that most commercial banks (33%) do not have a formal CX strategy in place and this reflects not only the Financial Services sector, but also an overall situation in the market. From the same figure, we found out that slightly over a third (31%) do have a CX strategy and

recognize it as being crucial. This is a reflection that the number of people who get CX right and those who do not is evenly divided and the differentiator therefore would be in actual execution of these strategies. This execution is what separates therefore those banks that merely have the CX strategy and recognize its importance from those that do align the strategy to the business processes and follow through with implementation. 22% of commercial banks have a clear strategy which in turn the value is measured and appropriated, this indicates that whereas a higher number (31%) have a CX strategy, that strategy is not necessarily creating measurable value and may not be aligned to the business process (only 14% have CX strategy aligned to the business processes).

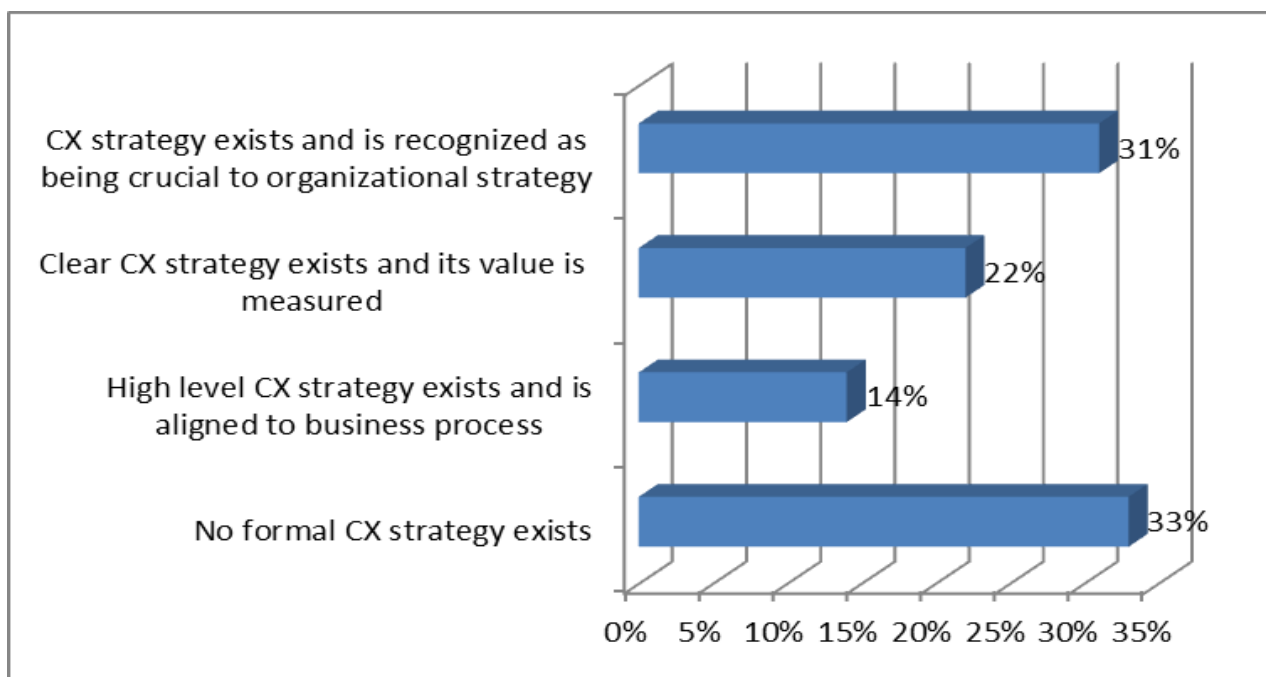


Figure 4.2: CX and Operations of the Organization

Figure 4.3 reveals that a majority (46%) believe that the CX Strategy and decision-making responsibility is with several managers on various lines of business. This implies that decision making in terms of CX exists in some sort of continuum where each business unit/line of business plays a critical role to deliver on the CX vision. We also observed that the lowest percentage (8%) had non structured ownership of the CX Strategy, meaning that such organizations could easily fail to deliver on their CX promise. However, at the board level, 14% is a positive indication of how CX strategy and decision making is increasingly becoming a strategic tool for organizations especially commercial banks.

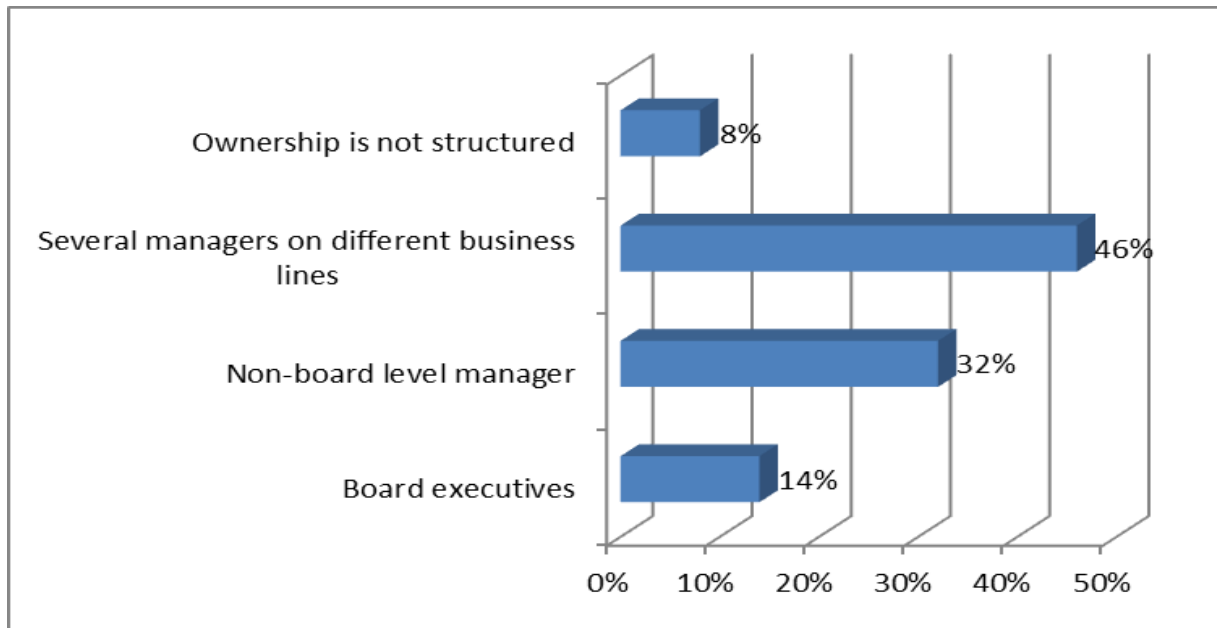


Figure 4.3: Responsibility of CX strategy Decision Making

Customer loyalty (39%) is the key benefit of improved CX in commercial banks, and innovation is the least benefit (14%) derived from CX. This finding from Figure 4.4 reveals therefore that commercial banks that have customers who are loyal have not only been able to provide them with great CX, but also this has resulted in an effect in their profitability since increased profits (26%) is the second factor. When commercial banks improve the loyalty of their customers, they can also improve profitability. It was also important to observe that improving CX drives some extent of innovation (14%) which is an important element in provision of banking services especially in the digital age. This innovation is what can in return drive better CX.

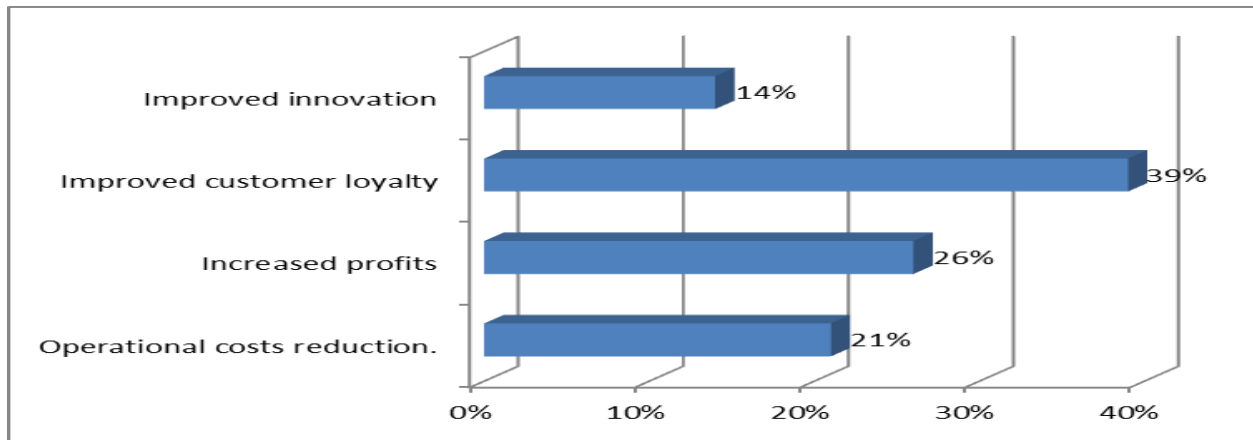


Figure 4.4: Benefits of improved CX

From Figure 4.5 stemming intelligence either through machine learning and or Artificial Intelligence and insights through customer data analytics (32%) is the number one element when providing wholistic CX. This is supported by the fact that robotics and AI comes in second (27%) which supports the need to define and deliver CX strategies that give insights to the business for decision making. We also saw that data integration (6%) was the lowest and this can be explained by the fact that increasingly commercial banks already have or assume that their data is inherently integrated in some way and thus this is not a main component of the CX arm but rather a business need as well as regulatory requirement.

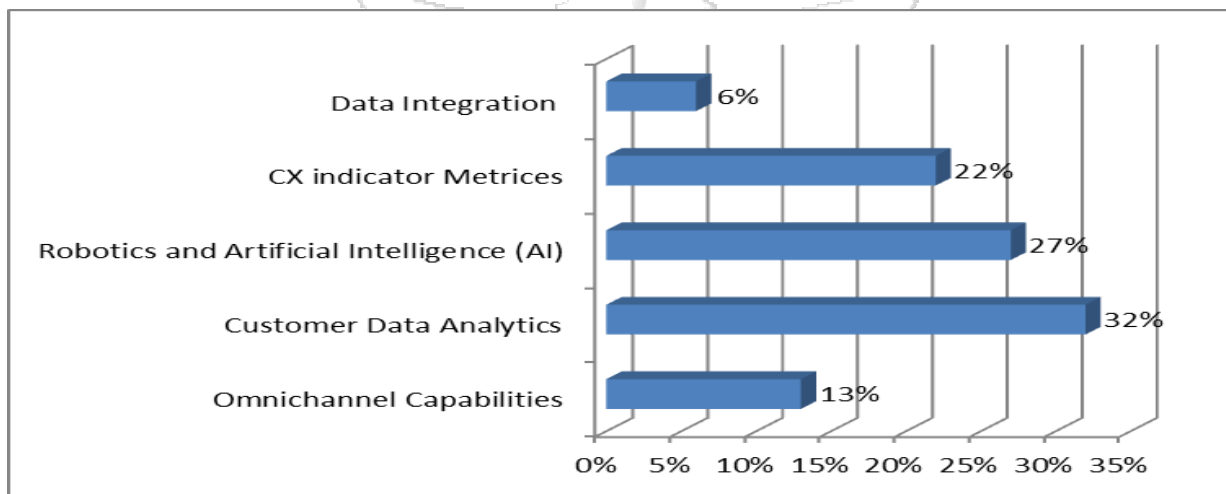


Figure 4.5: Components of CX

From Figure 4.6, the age-old Net Promoter Score (NPS) is still the number one measure (17%) of effectiveness of CX in commercial banks. Followed closely by employee Net Promoter Score (eNPS) at 13%. This backs the fact that CX delivery measurement is not just about the customers promoting the organization's services, but also of the employees of the organization (commercial bank) being ambassadors of the organization advocating for not only its services but its overall culture and customer centricity. This gives confidence to the organization both from an external perspective (customers – NPS) as well as internal perspective (eNPS).

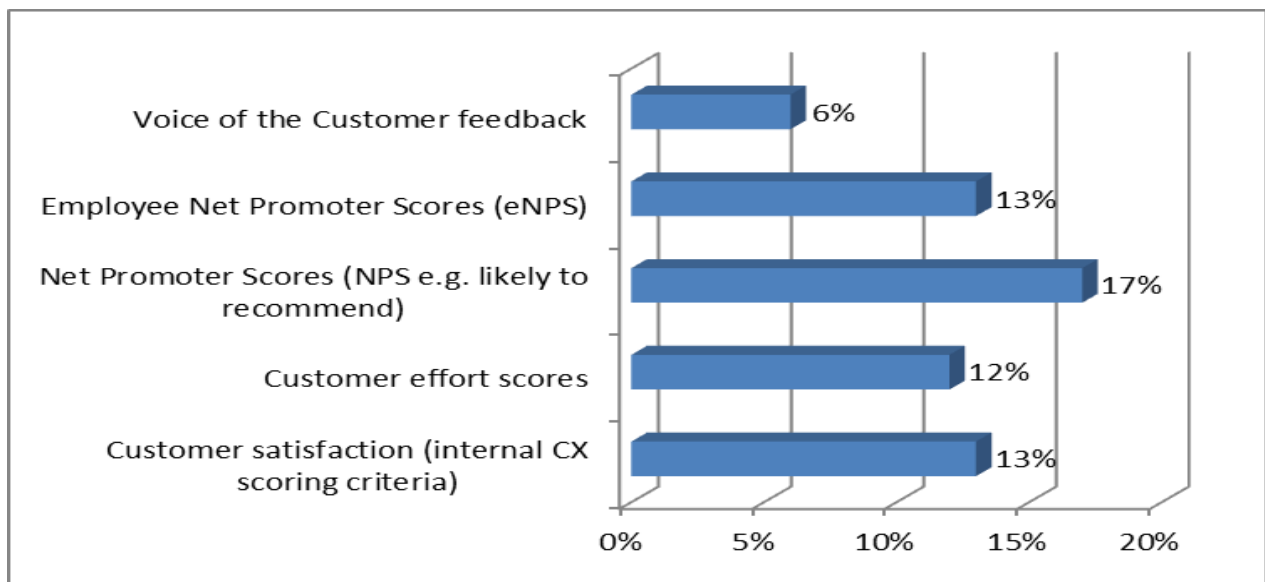


Figure 4.6: CX Measures

4.3 Customer Sentiment analytics on Delivery of Customer Experience

The first objective of the study was to examine the effect of customer sentiments analytics on delivery of customer experience in commercial banks in Kenya. Table 4.6 reveals that majority of the respondents were in agreement (strongly agreed + Agreed) that Customer Sentiment analytics helps with better financial service delivery (91%), customer sentiment analytics inform management on the strength and weakness of a product or service in order to improve customer experience (82%), customer sentiment analytics highlight critical areas in order to make service and product enhancements (90%), customer sentiment analytics assist in providing trust between the consumer and organization (87%), customer sentiment analytics assist the organization in gaining the trust of its consumers (93%), customer sentiment analytics create a relationship with

the consumer and organization (97%). In looking at the results from *Figure 4.4* and *Table 4.6*, it was observed that improved loyalty (39%) as the key benefit for CX delivery has a relationship with the role customer sentiment analytics plays in relationship creation between consumer and organization (97%). As the relationship between the customers and the organization (commercial banks in this case) improves, their loyalty to the services and products is also improved. This is a very critical element since the CX strategy and decision makers need to ensure that their delivery of the services enhances this relationship. Furthermore, building organizational trust between the customer and the organization (93%) as a key element of CX is key. As organizations build trust, loyalty goes up and as result, elements like NPS are enhanced.

Table 4.6: Customer Sentiment analyses on Delivery of Customer Experience

Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree	Mean
Customer Sentiment analytics help with better financial service delivery	70.1	20.9	5.0	2.0	2.0	4.81
Customer Sentiment analytics inform management on the strength and weakness of a product or service in order to improve customer experience	60.1	11.9	20.0	8.0	0	4.56
Customer Sentiment analytics highlight critical areas in order to make service and product enhancements	55.0	35.0	5.0	5.0	0	4.00
Customer Sentiment analytics assist in providing trust between the consumer and organization	72.0	15.0	3.0	5.0	5.0	4.38
Customer Sentiment analytics assist the organization in gaining the trust of its consumers	69.0	24.0	7.0	0	0	4.59
Customer Sentiment analytics create a relationship with the consumer and organization	74.0	23.0	3.0	0	0	4.82

Source: Survey Data (2019)

4.4 Customer Satisfaction Analytics on Delivery of Customer Experience

The second objective of the study was to determine the effect of customer satisfaction analytics on strategic decision making towards delivery of customer experience in commercial banks in Kenya.

As shown in Table 4.7, customer satisfaction analytics assist in providing trust between the consumer and organization (93%), and customer satisfaction analytics assist the organization in catering to the consumer's special and unique needs (83%), this showed the importance of enhancing organizational trust and delivering customer satisfaction analytics that attend to each customer's needs respectively. Secondly, customer satisfaction analytics assists the organization in providing feedback as to what service or product the consumer will act positively toward (77%), customer satisfaction analytics highlight critical areas in order to make service and product enhancements (82%), customer satisfaction analytics assist the organization in gaining the trust of its consumers (74%), customer satisfaction analytics create a relationship with the consumer and organization (77%).

Table 4.7: Customer Satisfaction Analytics on Delivery of Customer Experience

Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean
Customer satisfaction analytics assists the organization in providing feedback as to what service or product the consumer will act positively toward	6%	14%	3%	62%	15%	4.44
Customer satisfaction analytics assist the organization in catering to the consumer's special and unique needs	2%	11%	4%	65%	18%	4.09
Customer satisfaction analytics highlight critical areas in order to make service and product enhancements	10%	4%	4%	55%	27%	4.15
Customer satisfaction analytics assist in providing trust between the consumer and organization	2%	4%	3%	62%	31%	4.24
Customer satisfaction analytics assist the organization in gaining the trust of its consumers	12%	9%	5%	49%	25%	4.07
Customer satisfaction analytics create a relationship with the consumer and organization	6%	14%	3%	62%	15%	4.72

Source: Survey Data (2019)

4.5 Sales Data Analytics on Delivery of Customer Experience

The third and final objective of the study was to analyze the effects of sales channels analytics on delivery of customer experience in commercial banks in Kenya. From Table 4.8, we saw that the main pain that sales data analytics addressed was in enabling organizations to address issue regarding what the customer thinks about a certain product or service (94%), followed by matters of risk, customer satisfaction and additional knowledge on customer behavior all at 90%. It was also observed that sales data analytics assists the organizations in making better decisions (82%), and finally that the least impact of sales data analytics was with assistance in competition from other organizations (76%). This is an indication that probably this information on competition could be from other sources and not just sales data.

Table 4.8: Sales Channel Analytics on Delivery of Customer Experience

Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree	Mean
Sales data analytics help in determining what the customer thinks about a certain product or service	77.0	17.0	3.0	3.0	0	4.81
Sales data analytics helps enhance consumer satisfaction	67.0	23.0	2.09	1.3	7.0	4.56
Sales data analytics provide insight into consumer behavior that the organization was previously unaware of	55.0	40.0	5.0	0	0	4.00
Sales data analytics assists the organizations in making better decisions	62.0	20.0	8.0	5.0	5.0	4.38
Sales data analytics assist with competition from other organizations	61.0	15.0	16.0	8.0	0	4.59
Sales data analytics assist organizations in observing concerns or risks	70.0	20.0	7.0	3.0	0	4.82

Source: Survey Data (2019)

4.6 Regression Analysis

Table 4.9 (a) shows that the adjusted R square value of the model was .571 indicating that 57.1 percent of delivery of customer experience, is influenced by customer sentiment analytics, customer satisfaction analytics as well as sales data analytics. The study also revealed that delivery

of customer experience in commercial banks in Kenya is influenced by customer sentiment analytics (beta, 0.528), customer satisfaction analytics (beta, 0.461), sales data analytics (beta, 0.549). The following regression equation was adopted in the analysis: $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where:

$Y = \text{Delivery of Customer Experience}$

$X_1 = \text{Customer Sentiment Analysis}$

$X_2 = \text{Customer Satisfaction Analytics}$

$X_3 = \text{Sales Data Analytics}$



Table 4.9: Regression Analysis Outsourcing

Model Summary							
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate		
1		.541 ^a	.621	.571	1.84532		
a. Predictors: (Constant), customer sentiment analytics, customer satisfaction analytics, sales data analytics							
ANOVA							
The reveals that there was a significant relationship between Strategic Decisions towards CX and Sentiments, Satisfaction and Sales Data F= (1, 41) = 4.642, P<0.000.							
Model		Sum of Squares	df	Mean squares	F	Sig	
Regression		14.597	1	14.597	4.122	.003 ^b	
1	Residual	347.043	42	3.541			
	Total	361.640	43				
b. Dependent Variable: Delivery CX							
c. Predictors: (Constant), Sentiments, Satisfaction, Sales Data							
COEFFCIENTS							
The coefficients show that there was a positive significant relationship between Strategic Decisions towards CX and Sentiments, Satisfaction and Sales Data with β = 0.626 and a T-value of 2.230							
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
		B	Std. Error	Beta			
1	(Constant)	3.716	2.089		1.778	.001	
	Sentiments	.608	.423	.602	4.895	.000	
		Satisfaction	.591	.346	.598	6.876	.000
		Sales Data	.600	.417	.542	5128	.000
d. Dependent Variable: Delivery of CX							

Source: Survey Data (2019)

4.7 Chapter Summary

This chapter has presented an analysis of the findings of the study with regards to the various responses issued by the respondents involved in the study. In this study a total of 43 commercial banks were involved in the study in which one respondent from every bank was issued with a questionnaire. The response rate was 100% given that the unit of analysis was relatively small. This chapter therefore presented the background information of the respondents followed by analyzed data in respect of the three research objectives. The next chapter presents a detailed discussion of the study, as well as conclusions and recommendations.



CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The main objective of this study was to investigate the effect of customer data analytics towards delivery of Customer experience (CX) among commercial banks in Kenya. The study was guided by the following research objectives: To examine the effect of customer sentiments analytics on delivery of customer experience in commercial banks in Kenya, to determine the effect of customer satisfaction analytics on delivery of customer experience in commercial banks in Kenya and to analyze the effects of sales channels analytics on delivery of customer experience in commercial banks in Kenya. This study employed a descriptive research design. This chapter presents a summary of findings, conclusions and recommendations of the study in line with the findings of the study as outlined in chapter four.

5.2 Discussion

5.2.1 Customer Sentiment Analytics on delivery of Customer Experience

The study revealed that there was a positive significant relationship between customer sentiment analytics and delivery of customer experience. The findings agree with Dehghani et al., (2012) who argued that customer sentiment analytics enhances active interaction between the consumer and the bank, given that it aids in with customer satisfaction. Due to the advancement of analytics, organizations and banks have an opportunity to offer customized offers to their respective clients. In this regard therefore banks can take consumer satisfaction to higher levels, as they will be able to respond to consumer feedback and opinions better than before (Kumar and Devi, 2014).

The study further revealed that majority of the respondents were in agreement, customer Sentiment analytics help with better financial service delivery, customer sentiment analytics inform management on the strength and weakness of a product or service in order to improve customer experience, customer sentiment analytics highlight critical areas in order to make service and product enhancements, customer sentiment analytics assist in providing trust between the consumer and organization, customer sentiment analytics assist the organization in gaining the trust of its consumers, customer sentiment analytics create a relationship with the consumer and organization.

These findings affirm that indeed customer sentiment analytics can also be useful when it always comes to making customers happy by determining and attending to specific needs of the consumers. This means therefore that with customer sentiment analysis organizations will be well supported through development of solid customer relationships by way of improved engagement that take place in real time basis (Bekmamedova, 2014). In addition, customer sentiment analysis aids in the provision of visual data as well as statistics and this therefore removes any chances of human error, which means that organizations are now able to make use of the available customer sentiments data to their advantage. For example organizations can make use of customer sentiments analytics to make sure that consumers are in better position to clearly understand what they expect to get from their purchasing decisions for any particular good or service (Sharma, 2013).

Organizations in the financial industry are using dashboards to assist with decision making in the delivery of customer experience. Stone (2009) further revealed that banks are using customer sentiment analytics for customer engagement programs in the provision of relevant real time interactive content. Banks also use customer sentiment analytics in encouraging consumers to assist with recommendations as well as improvements that will go a long way in enhancing the banks offerings, which is very beneficial to the bank as well as to the banking customers. Additionally, customer sentiment analytics has been used by commercial banks in brand awareness regarding the different programs available.

5.2.2 Customer Satisfaction Analytics on Delivery of Customer Experience

The study further revealed that there was a positive significant relationship between customer satisfaction analytics and delivery of customer experience. This is a confirmation that indeed customer satisfaction analytics enables businesses to identify the needs of the customers hence enable them to adjust their price points for their services. It would also enable to drive offers that would result in optimal returns through meeting specific customer needs for specific customer groups rather than general approaches. Data analytics could also enable Commercial banks to improve on their customer acquisition, increase revenue per customer, reduce on the costs required to retain customers, decrease customer attrition and to improve on their products and services (McKinsey, 2016).

Similarly, data analytics will continue to be a necessity for financial institutions seeking to compete favorably and deliver superior customer experience (Laika & Norazah, 2017). By applying data science tools in collecting, processing and analyzing data, Commercial banks could greatly improve their business process and ultimately align themselves towards achieving customer centricity. Customer data can be used in manner that will boost customer loyalty and increase their lifetime value (Berry, Carbone, & Haeckel, 2002).

Finally, the findings affirm that indeed data analytics will continue to be a necessity for financial institutions seeking to compete favorable and deliver superior customer experience (Laika & Norazah, 2017). By applying data science tools in collecting, processing and analyzing data, Commercial banks could greatly improve their business process and ultimately align themselves towards achieving customer centricity. Customer data can be used in manner that will boost customer loyalty and increase their lifetime value (Berry, Carbone, & Haeckel, 2002).

Customer satisfaction analytics enables businesses to identify the needs of the customers hence enable them to adjust their price points for their services. It would also enable to drive offers that would result in optimal returns through meeting specific customer needs for specific customer groups rather than general approaches. Data analytics could also enable Commercial banks to improve on their customer acquisition, increase revenue per customer, reduce on the costs required to retain customers, decrease customer attrition and to improve on their products and services (McKinsey, 2016).

5.2.3 Sales Data Analytics on Delivery of Customer Experience

The study also revealed that there was a positive significant relationship between sales data analytics and delivery of customer experience. The findings agree with Cespedes et al (2014) who carried out a study to examine the relationship between sales data analytics customer loyalty and revealed that there was a positive significant relationship between sales data analytics and customer loyalty in the manufacturing industry. The study further established that of all three productivity factors, customer selection had a significant relationship with sales data analytics. As a motivation for studying the customer selection approach, Cespedes et al (2014) mention the observation that profitable sales are generally attributable to relatively few customers.

Sales data analytics has one characteristic which is always mentioned to be a very distinguishing feature; this is the ability as well as the willingness to make use of real-time sales data when it comes to everyday decisions. Good firms use sales data in the evaluation of previous decisions, to be able to automate operations and to report on performance, on the other hand however excellent firms make use of real-time data to drive their day-to-day decision making as well as their innovation activities. Kiron et al. (2013) for instance opines that exceptional performers look at sales data as a core asset while analytical insights are seen to be part of the culture of the firm and are useful when it comes to strategic decisions.

To this end, it has been proposed that there is need to develop real-time recommendation systems especially when it comes to digitally distributed services such as Netflix and Amazon. This is because the existence of these systems has made real-time data available and therefore it enhances the customer experience for quite several organizations. These organizations however need to develop quite several changes especially with regards to sales data that inform real time decisions for these respective organizations. Additionally, real-time decision systems is considered to be essential especially when it comes to distribution systems that might not be able to fit properly on real-time recommendation systems which have ideally been the order of the day in most organizations (Cameron and Brunette, 2016).

5.3 Conclusion

Based on the findings the study concludes that delivery of customer experience is influenced by, customer sentiment analytics, customer satisfaction analytics and sales data analytics. This confirms that data analytics can be adopted by exceptional performers to gain mileage by adopting data visualization techniques, as well as simulations and scenario development. This is because, such firms could identify the business challenges which are likely to result significant gains for the organization while also focusing and focus on organization challenges. In addition, organizations can be able to start the analytics process from questions, and then figure out what data and processing to use to answer those questions.

Of the three types of analytics, customer sentiment analytics has the highest influence when it comes to commercial banks in Kenya. This affirms the argument that indeed customer sentiment analytics plays an important role in the financial industry in Kenya as seen in the way it has aided

in measuring market opinion while also informing market trading. Organizations in the financial industry in Kenya are using dashboards to assist with decision making in the delivery of customer experience.

Finally, irrespective of the type of data analytic chosen, success will be significantly influenced by the commercial bank to adopt and effectively make the strategic decisions based on the data analytics adopted. As customer satisfaction and by extension the whole CX phenomenon becomes a critical goal for most businesses, compelling customer experiences increasingly rely on data and analytics.

5.4 Recommendations

Based on the findings the study concludes that, decision making towards delivery of customer experience is influenced by, customer sentiment analytics, customer satisfaction analytics and sales data analytics. The study therefore recommends the need for commercial banks in Kenya to continue engaging its clientele through customer satisfaction surveys as well as general data analysis of the purchasing behavior of their customers as a way of understanding the buying trends to inform the various decisions undertaken by the customers. This will go a long way in enhancing the customer experience by commercial banks in Kenya.

Additionally the study recommends the need for commercial banks in Kenya to expand their data analysis departments and provide them with sufficient resources so that they can have sufficient capacity to be able to effectively collect analyses and interpret customer specific data so that it can inform strategic decision making by commercial banks.

Finally, the study recommends the need for strategic managers in commercial banks in Kenya to work closely with data analysis experts to be able to benefit from their knowledge in data analysis and therefore use that knowledge to effectively make strategic decisions with regards to customer experience.

5.4.1 Recommendations for Further Studies

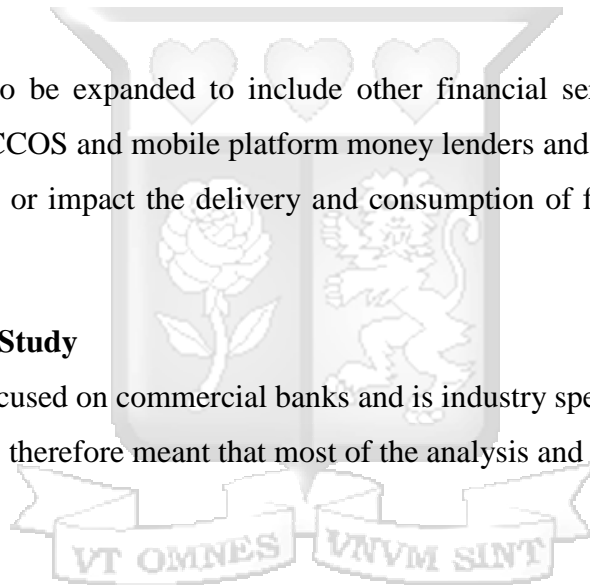
A possible area for further research is to employ a longitudinal research design in carrying out the study. This will give provide a stronger basis for causal linkages between data analytics and strategic decisions as it will consider the influence of the customer data analytics on strategic decisions towards delivery of customer experience over time.

As digital CX strategies evolve and more sophisticated attributes and or elements of CX emerge, other areas of analytics which involve aspects like machine learning, Artificial Intelligence and automation of the whole banking and financial services delivery, new areas of analytics such as social and customer behavior analytics may need to be explored. Other areas of CX analytics such as robotics and automation and their impact of delivery of CX and CX strategies are areas that need studying.

This research should also be expanded to include other financial service institutions such as Insurance providers, SACCOS and mobile platform money lenders and applications to determine how CX strategies affect or impact the delivery and consumption of financial services in these platforms.

5.4.2 Limitations to the Study

The research was only focused on commercial banks and is industry specific in terms of its outlook and findings, this therefore meant that most of the analysis and interpretation were based on this industry.



REFERENCES

- Abbott, L. (1955). *Quality and Competition : An Essay in Economic Theory*. Sage Journals.
- Accenture. (2015). *Digital Transformation in the Age of the Customer*. NEW YORK: Forrester Consulting.
- al, D. e. (2012). The role of social media advertising in motivating consumer in banking services. *Interdisciplinary journal of contemporary research in business*,, 774-787.
- al, L. e. (2011). Importance of Brand Awareness and Brand Loyalty in Assessing Purchase Intentions of Consumer. *International Journal of Business*, 4-5.
- al., S. e. (2011). Big Data Investment, Skills, and Firm Value. *Management Science* , 221-234.
- Alderson, W. (1957). *Marketing Behavior and Executive Action: A Functionalist Approach to Marketing Theory*. Homewood, IL: R. D. Irwin.
- Arthur, L. (2013). *Big data marketing : engage your customers more effectively and drive value*. Hoboken, New Jersey: Wiley.
- Barney. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*,, 99-120.
- Bekmamedova. (2014). SMA and Business Value: A Theoretical case Study. *2014 47th Hawaii International*, 3728–3737.
- Berry, L. L., Carbone, L. P., & Haeckel, S. H. (2002). Managing the Total Customer Experience. *MIT Sloan Management Review*, 85-89.
- Bierly PE, D. F., & Santoro MD. (2009). The application of external knowledge: organizational conditions for exploration and exploitation. *Journal of Management Studies*, 481-509.
- Bolton, R., Gustafsson, A., McColl-Kennedy, J., Sirianni, N., & Tse, D. (2014). “Small details that make big differences: a radical approach to consumption experience as a firm’s differentiating strategy. *Journal of Service Management*, 25(2), 253-274.
- Brunette, C. a. (2014). *Customer satisfaction measurement and*. OH: Thomson.

- Bryson J, A. F. (2007). Putting The Resource Based View of Strategy and Distinctive Competencies To Work in Public. *Public Adm Rev*, 702-717.
- C R, K. (2005). *Research methodology : methods & techniques*. New Delhi: New Age International (P) Ltd.
- Casebeer A, R. T. (2010). Knowing Through Doing: Unleashing Latent Capabilities in the Public Sector. In H. G. Walshe K, *Connecting Knowledge and Performance in Public Services*. (pp. 251-75). Cambridge: Cambridge University Press;.
- CBK. (2018, january 30). Retrieved from Central bank of Kenya: www.cbk.go.ke
- Cespedes. (2014). *Making Consumer Satisfaction Happen*:. UK: Chapman and Hall. .
- Chandler, J. D., & Lusch, R. F. (2015). Service Systems: A Broadened Framework and Research Agenda on Value Propositions, Engagement, and Service Experience. *Journal of Service Research*, 18(1), 6-22.
- Chow. (2015). Investigating customers' satisfaction with brand pages in social networking site. *Journal of Computer Information Systems*, , 48-58.
- Daniel, J. (2012). *Sampling essentials : practical guidelines for making sampling choices*. Los Angeles: Sage.
- De Keyser, Arne, K. N., Keiningham, T., & Klaus, P. (2015). *A Framework for Understanding and Managing the Customer Experience*. Cambridge, MA: Marketing Science Institute.
- Dimension Data Solutions. (2017). *The Global Customer Experience Benchmarking Report*. Dimension Data.
- Dr. Poonam, C., Aditya, M., & Dhiraj, L. (2017). Role of big data in retail customer-centric marketing. *National Journal of Multidisciplinary Research and Development*, 484 - 488.
- Dutter, F. a. (2014). *Ask, measure, learn: Using SMA to understand*. USA: O'Reilly Media, Inc.
- Efma. (2017). *Tailoring the data driven customer experience*. Retrieved from EY: <https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.ey.com/Publication/vwLUAssets/ey-efma-tailoring-the-data-driven-customer-experience/%24File/ey->

efma-tailoring-the-data-driven-customer-experience.pdf&ved=2ahUKEwiWm_iNm_vcAhVH0RoKHbHjC98QFjA

- Fan, & G. (2017). The Power of SMA Communications. *Association for Computing Machinery*, 74-81.
- Finklestein. (2017). Some Theoretical Aspects Concerning The Strategies'. *Annals of the University of Petroșani, Economics*, 18, 95-100.
- Flick, U., Metzler, K., & Scott, W. (2014). *The SAGE handbook of qualitative data analysis*. Los Angeles ; London: Sage.
- Garg, R., Rahman, Z., & Qureshi, M. (2014). Measuring customer experience in banks: scale development and validation. *Journal of Modelling in Management*, 87-117.
- Gartner. (2018, December 10). *Gartner Customer Experience & Technologies Summit*. Retrieved from Gartner: https://www.gartner.com/en/conferences/emea/customer-experience-uk?utm_medium=assets&utm_source=vanity&utm_campaign=evt_eu_yoy_cx
- Gronoos. (2012). Organizational Models for Big Data and Analytics. *Journal of Organization Design*, , 15-23.
- Hayes, B. E. (2009). *Beyond the ultimate question : a systematic approach to improve customer loyalty*. Milwaukee, Wis: ASQ Quality Press.
- He et al. (2015). A Novel SM. *Information*, 123-129.
- Hilpi, J. (2017). *Measuring customer experience in online grocery industry*. Helsinki: Lappeenranta University of Technology.
- Holbrook, M. (2007). The consumption experience – something new, something old, something borrowed, something sold: part 2. *Journal of Macromarketing*, 15(1), 59-75.
- kathuria, A. (2016). Impact of Big Data analytics on banking sector. *International Journal of Science, Engineering and Technology Research (IJSETR)*, 3138-3141.
- King, B. (2010). *Bank 2.0 : How customer behaviour and technology will change the future of financial services*. Singapore: Marshall Cavendish Editions.

- Klimis. (2010). Digital marketing: the gradual integration in retail. *EFMA Journal*, 16-19.
- Kohirkar, G. a. (2015). *SMA: Techniques and Insights for Extracting Business Value out of SM*. United States:: IBM Press.
- Kuada, J. (2012). *Research methodology - a project guide for university students*. Samfundslitteratur.
- Kumar. (2014). SM in Financial Services. *Procedia Economics and Finance*, 306-313.
- Laika, S., & Norazah, Y. (2017). A Review: Big Data Analytics for enhanced Customer Experiences Analytics for enhanced. *2nd International Conference on Computer Science and Computational Intelligence 2017*, (pp. 274 - 283). Bali, Indonesia: Science Direct.
- Lapan, S. D., Quartaroli, M. T., & Riemer, F. J. (2011). *Qualitative Research : An Introduction to Methods and Designs*. Hoboken : Wiley.
- Maxwell, J. A. (2012). *Qualitative research design : an interactive approach*. Thousand Oaks: Sage.
- Mbama, C. I., & Ezepue, P. O. (2018). Digital banking, customer experience and bank financial performance: UK customers' perceptions. *International Journal of Bank Marketing*, 230-255.
- McKinsey. (2015, March). *Marketing & Sales Big Dta, Analytics and trhe future of Marketing and Saales*. Retrieved from McKinsey & Company: <https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.mckinsey.com/~media/McKinsey/Business%20Functions/Marketing%20and%20Sales/Our%200Insights/EBook%20Big%20data%20analytics%20and%20the%20future%20of%20marketing%20sal>
- McKinsey. (2016, December). *THE AGE OF ANALYTICS: COMPETING IN A DATA-DRIVEN WORLD*. Retrieved from McKinsey: <https://www.mckinsey.com/~media/McKinsey/Business%20Functions/McKinsey%20Analytics/Our%20Insights/The%20age%20of%20analytics%20Competing%20in%20a%200data%20driven%20world/MGI-The-Age-of-Analytics-Full-report.ashx>

- Meyer, C., & Schwager, A. (2007). Understanding Customer Experience. *Harvard Business Review*, pp. 117 - 126.
- Oluwasola, S. H. (2017). How to Improve Efficiency of Banking System with Big Data (A Case Study of Nigeria Banks). *International Journal of Science and Research (IJSR)*, 944 - 947.
- Oracle. (2015, February). *Big Data in Financial Services and Banking: Architect's Guide and Reference Architecture Introduction*. Retrieved from Big Data in Financial Services and Banking: Architect's Guide and Reference Architecture Introduction: <http://www.oracle.com/us/technologies/big-data/big-data-in-financial-services-wp-2415760.pdf>
- Oracle. (2015, February). *Oracle*. Retrieved from Big Data in Financial Services and Banking: Architect's Guide and Reference Architecture Introduction: <http://www.oracle.com/us/technologies/big-data/big-data-in-financial-services-wp-2415760.pdf>
- Oracle. (2017). *How Data Drives Customer Experience*. Retrieved from Oracle: https://www.google.com/url?sa=t&source=web&rct=j&url=http://www.oracle.com/us/products/applications/cx-trends-ebook-3613741.pdf&ved=2ahUKEwiWm_iNm_vcAhVH0RoKHbHjC98QFjACegQICBAB&usg=AOvVaw0TE18QoUfHjD0fVneS3iWd
- Palem, G. (2014). Formulating an Executive Strategy for Big Data Analytics. *Technology Innovation Management Review*, 25 - 26.
- Pine, J. B., & Gilmore, J. H. (1998). *The Experience Economy: Work Is Theater and Every Business a Stage*. Cambridge, MA: Harvard Business School Press.
- Prahalad and Javinda, R. (2013). The Cornerstones of Competitive Advantage:. *Strategic Management Journal*, 14, 79-91.
- PricewaterhouseCoopers. (2018, January). *Data Analytics in the Financial Services Industry*. Retrieved from PWC: <https://www.pwc.com/id/en/publications/Actuarial/data-analytics-financial-services.pdf>

- Romika Yadav, M., & Tarun Kumar, G. (2015). Usage of Big Data Analytics for Customer Relationship Management. *International Journal of Advanced Research in Computer Science*, 1 - 3.
- Ruhi. (2014). Social media Analytics as a business intelligence practice:. *Journal of Internet Social Networking &*, 1-12.
- Russell, G., & Sean, C. (2014). *The big data-driven business : how to use big data to win customers, beat competitors, and boost profits*. Hoboken: Wiley.
- SAS. (2018). *Data Elevates Consumer Experience*. Retrieved from Forbes Insights: <https://images.forbes.com/forbesinsights/StudyPDFs/SAS-DataElevatesTheConsumerExperience-REPORT.pdf>
- Sathi, A. (2014). *Engaging customers using big data : how marketing analytics are transforming business*. New York: Palgrave Macmillan.
- Schmarzo, B. (2013). *Big data : understanding how data powers big business*. Indianapolis: John Wiley & Sons.
- Schmitt. (2003). The impact of. *An International Journal*, 300-311.
- Schmitt, B. (2011). Experience Marketing: Concepts, Frameworks and Consumer Insights. *Foundations and Trends in Marketing*, 5(2), 55 - 112.
- Schmitt, B. H., Brakus, J. J., & Zarantonello, L. (2015). From Experiential Psychology to Consumer Experience . *Journal of Consumer Psychology*, 166-171.
- Sharma. (2013). Leveraging SMA to Benefit the End Customer. *Silicon*, 38-39.
- Shaw, C., & Hamilton, R. (2016). *The Intuitive Customer : 7 Imperatives For Moving Your Customer Experience to the Next Level*. London: Palgrave Macmillan UK.
- Spiess, J., Joens, Y. T., Spencer, P., & Philippart, L. (March 2014). Using big data to improve customer experience and business performance. *Bell Labs Technical Journal*, 3 - 17.
- Srivastavaa, U., & Gopalkrishnanb, S. (2015). Impact of Big Data Analytics on Banking Sector: Learning for Indian Banks. *International Symposium on Big Data and Cloud Computing*, 643 – 652.

- Stieglitz et al. (2014). SMA: An Integrated Approach. *Business and Information System Engineering*, 89-96.
- Stone. (2009). Staying customer-focused and trusted: Web 2.0 and customer. *Journal of Database Marketing & Customer Strategy*, 103-131.
- Stuart, I. F., & Tax, S. S. (2004). Toward an Integrative approach to Designing Service Experiences: Lessons learned from the theater. *Journal of Operations Management*, 22(6), 609-627.
- Treleaven, B. a. (2014). SMA: A Survey of Techniques, Tools and Platforms. *Springer Science and Business Media*, , 89-116.
- Turner, D., Schroeck, M., & Shockley, R. (2013, May). *IBM*. Retrieved from Analytics: The real-world use of big data in financial services: https://www-935.ibm.com/services/multimedia/Analytics_The_real_world_use_of_big_data_in_Financial_services_Mai_2013.pdf
- Verhoef, P., Lemon, K., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. (2009). Customer experience creation: determinants, dynamics and management strategies. *Journal of Retailing*, 31-41.
- Yin, R. K. (2010). *Case study research : design and methods*. Los Angeles : Sage.
- Zheng. (2010). Social media Analytics and. *IEEE Intelligent Systems*, 13-16.

APPENDICES

Appendix I: Questionnaire

Section I: General Information

Kindly fill all the questions either by ticking (✓) in the boxes or writing in the spaces provided.

1. Age

- a. 20– 25 Years ☐
- b. 26 – 30 Years ☐
- c. 31 – 35 Years ☐
- d. Above 36 years ☐

2. Gender

- a. Male ☐
- b. Female ☐

3. Highest level of education

- a. Diploma ☐
- b. Bachelors ☐
- c. Masters ☐
- d. Doctorate ☐
- e. Other (Please specify) _____

4. Years of experience in the industry?

- a. Less than 3 ☐
- b. 3 – 5 ☐
- c. 6 – 10 ☐
- d. More than 10 ☐

5. Position in the organization?

- a. General Staff ☐
- b. Middle Level ☐
- c. General Staff ☐
- d. Senior Level ☐
- e. Executive Level ☐

SECTION II: CUSTOMER EXPERIENCE

To what extent does your organization consider customer experience (CX) essential in gaining competitive advantage?

☐ Extremely Critical

☒ Very Critical

☐ Fairly Critical

☐ Not Critical

To what extent is CX involved in the operations of your organization in terms of strategy?

☐ No formal CX strategy exists

☒ High level CX strategy exists and is aligned to business process

☐ Clear CX strategy exists and its value is measured

☐ CX strategy exists and is recognized as being crucial to organizational strategy

At what level or Who is responsible for handling CX strategy/decision making within your Organization?

☐ Board executives

☒ Non-board level manager

☐ Several managers on different business lines

☐ Ownership is not structured

What is the TOP 3 benefits have been realized by your company through improvement of CX?

Select 3 that
apply

Operational costs reduction.

☐

Increased profits

☐

Improved customer loyalty

☐

Improved innovation

☐

Other

☐

None

☐

How satisfied are you or is your organization satisfied with its CX capabilities?

☐ Very satisfied

☐ Fairly satisfied

☐ Fairly dissatisfied



Very dissatisfied

Which Components of CX would you consider the most critical in Commercial banks?

Omnichannel Capabilities



Customer Data Analytics



Robotics and Artificial Intelligence (AI)



CX indicator Metrics



Data Integration



How much of your enterprise data is available to key decision makers in your organization?



None



1-10%



11-25%



26-50%



51-75%



76-100%

Which of the following CX indicators do you measure?

Customer satisfaction (internal CX scoring criteria)	<input type="checkbox"/>
Customer effort scores	<input type="checkbox"/>
Net Promoter Scores (NPS e.g. likely to recommend)	<input type="checkbox"/>
Employee Net Promoter Scores (eNPS)	<input type="checkbox"/>
Voice of the Customer feedback	<input type="checkbox"/>
Contact propensity (contacts per customer)	<input type="checkbox"/>
Customer churn	<input type="checkbox"/>
Quality scores	<input type="checkbox"/>
Other	<input type="checkbox"/>
None	<input type="checkbox"/>



**SECTION III: CUSTOMER SENTIMENT ANALYTICS ON STRATEGIC DECISIONS
TOWARDS DELIVERY OF CUSTOMER EXPERIENCE**

1. Using a scale of 1 - 5, tick the appropriate answer from the alternatives provided.

1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree

Statement	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Customer Sentiment analytics help with better financial service delivery	1	2	3	4	5
Customer Sentiment analytics inform management on the strength and weakness of a product or service in order to improve customer experience	1	2	3	4	5
Customer Sentiment analytics highlight critical areas in order to make service and product enhancements	1	2	3	4	5
Customer Sentiment analytics assist in providing trust between the consumer and organization	1	2	3	4	5
Customer Sentiment analytics assist the organization in gaining the trust of its consumers	1	2	3	4	5
Customer Sentiment analytics create a relationship with the consumer and organization	1	2	3	4	5

SECTION IV: CUSTOMER SATISFACTION ANALYTICS ON STRATEGIC DECISIONS TOWARDS DELIVERY OF CUSTOMER EXPERIENCE

Using a scale of 1 - 5, tick the appropriate answer from the alternatives provided.

1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree

Statement	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Customer satisfaction analytics assists the organization in providing feedback as to what service or product the consumer will act positively toward	1	2	3	4	5
Customer satisfaction analytics assist the organization in catering to the consumer's special and unique needs	1	2	3	4	5
Customer satisfaction analytics highlight critical areas in order to make service and product enhancements	1	2	3	4	5
Customer satisfaction analytics assist in providing trust between the consumer and organization	1	2	3	4	5
Customer satisfaction analytics assist the organization in gaining the trust of its consumers	1	2	3	4	5
Customer satisfaction analytics create a relationship with the consumer and organization	1	2	3	4	5

How do you rate your organization's Customer Satisfaction analytics capabilities and use?

- ☐ Informs almost all business decisions
- ☐ Unable to fully handle the available data.
- ☐ Still at the initial implementation stages
- ☐ Data sources too variable/channels managed in silos



SECTION IV: SALES DATA ANALYTICS ON STRATEGIC DECISIONS TOWARDS DELIVERY OF CUSTOMER EXPERIENCE

2. Using a scale of 1 - 5, tick the appropriate answer from the alternatives provided.

1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree

Statement	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Sales data analytics help in determining what the customer thinks about a certain product or service	1	2	3	4	5
Sales data analytics helps enhance consumer satisfaction	1	2	3	4	5
Sales data analytics provide insight into consumer behavior that the organization was previously unaware of	1	2	3	4	5
Sales data analytics assists the organizations in making better decisions	1	2	3	4	5
Sales data analytics assist with competition from other organizations	1	2	3	4	5
Sales data analytics assist organizations in observing concerns or risks	1	2	3	4	5

How do you rate your organization's Sales Data analytics capabilities and use?

- ☐ Informs almost all business decisions
- ☐ Unable to fully handle the available data.
- ☐ Still at the initial implementation stages
- ☐ Data sources too variable/channels managed in silos



Appendix II: Letter of Introduction



Strathmore Business School

26th March 2019

To Whom It May Concern

Dear Sir/ Madam

RE: FACILITATION OF RESEARCH – JOSEPH OUKO

This is to introduce Joseph Ouko who is a Master of Business Administration student at Strathmore Business School, admission number MBA/71970/2017. As part of our MBA Program, Joseph is expected to do applied research and undertake a project. This is in partial fulfilment of the requirements of the MBA course. To this effect, he would like to request for appropriate data from your organization.

Joseph is undertaking a research paper on “**Effect of Customer Data Analytics on Delivery of CX in Banking Institutions.**” The information obtained from your organization shall be treated confidentially and shall be used for academic purposes only.

Our MBA seeks to establish links with industry, and one of these ways is by directing our research to areas that would be of direct use to industry. We would be glad to share our findings with you after the research, and we trust that you will find them of great interest and of practical value to your organization.

We appreciate your support and shall be willing to provide any further information if required.

Yours sincerely,

Caroline Tiara.
Manager – Masters’ Programs



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